

**OFFICE OF SURFACE MINING
RECLAMATION AND ENFORCEMENT**

U.S. Department of the Interior



**Annual Evaluation Report for the
Regulatory and Abandoned Mine Land Programs
Administered by Kentucky Department for Natural
Resources**



For Evaluation Year 2014

July 1, 2013 to June 30, 2014

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Executive Summary

Kentucky Regulatory Program

The Surface Mining Control and Reclamation Act of 1977 (SMCRA) provides authority to the Office of Surface Mining Reclamation and Enforcement (OSMRE) Lexington Field Office (LFO) to oversee the administration of the Kentucky Department for Natural Resources (KYDNR) approved regulatory program. OSMRE's Evaluation Year (EY) 2014 Annual Evaluation Report covers the period July 1, 2013 to June 30, 2014. On January 31, 2011, the OSMRE Director signed *Directive REG-8* that established revised policies, procedures, and responsibility for conducting oversight of the State regulatory program. The revised directive provides the outline for this Annual Evaluation Report.

An Annual Performance Agreement was jointly developed by LFO and KYDNR. LFO solicited input into the draft Agreement by providing notices to interested citizens, industry, and environmental groups requesting suggestions for potential oversight evaluation topics. The EY 2014 Annual Performance Agreement can be seen online at the OSMRE at: <http://www.arcc.osmre.gov/FOs/LFO/KY/kyoversight.shtm>.

Accomplishments

During EY 2014, KYDNR continued to make significant improvements to its approved Regulatory program. A summary of those accomplishments are listed below and further discussed in the Annual Evaluation Report.

Cumulative Hydrologic Impact Assessments (CHIAs) & Trend Stations

One of the areas where KYDNR has improved significantly is the Cumulative Hydrologic Impact Assessments or CHIA. These watershed documents provide written assessment of mining on surface and ground water systems present in the vicinity. The CHIAs were at heart of a Notice of Intent to Sue and required immediate attention. The process started in earnest in EY 2009 and continues today on multiple fronts through EY 2014. When conducting an assessment, up to 10 separate databases are consulted and water quality data are summarized and median values are determined. If it is determined that the addition of another permit would result in a cumulative effect that approach the level of material damage, the permit should be sent back to the applicant for design modifications or deferral to the KPDES process for appropriate limits. Previously funds provided by OSMRE for trend station sampling and analysis have been expended and KYDNR will continue the

project using court-ordered monetary judgments matched by OSMRE funding. Analytical and field analyses from the quarterly events are uploaded to KYDNR's website where it is available to all stakeholders.

Appalachian Reforestation Initiative (ARRI)

KYDNR improved their leadership role in the Appalachian Regional Reforestation Initiative (ARRI) during the EY 2014 year by continuing to expand reforestation on Title IV projects and Title V permits. The KYDNR also participated on 14 projects with Green Forests Work (GFW), the 501(c)(3) nonprofit ARRI partner that works to re-establish healthy and productive forests on former surface mined lands (legacy sites) in Appalachia. LFO participated in the 2014 KYDNR Arbor Day event with students from Bell County to document and plant 625 experimental American chestnut nuts. An experimental practice was successfully demonstrated that the Forest Reclamation Approach can be used on steep slope areas without causing additional erosion and sediment issues.

Geographic Information System (GIS) and Geomine

GIS: GIS continues to serve the KYDNR Division of Mine Reclamation and Enforcement (DMRE), Division of Abandoned Mine Lands (DAML), and Division of Mine Permits (DMP) with a variety of TIPS applications. KY has developed many custom tools that enable their users to quickly load mine maps and related information. New applications of technology for the inspector's smart phones and tablets are being tested including PDFmaps and Geocam for capturing geotagged photos.

Geomine: KYDNR remains an active participant in the GeoMine Pilot Project — an OSMRE concept of an internet accessible GIS database of coal mines in the United States. Kentucky used the grant to obtain hardware and software and used interns to assist with the data preparation and organization for this project. KYDNR continues to create additional digital data to address the agency's needs, and train KYDNR staff on both the applications of the software systems and the different data types that are available in the system.

Interagency Fill Meetings

KYDNR and LFO are active participants in the Interagency Clean Water Act Coordination efforts with the EPA, COE, USFWS, DOW, and Kentucky Department of Fish and Wildlife Resources (KDFWR). KYDNR hosts meetings of the staff level interagency workgroup and is an active contributor to that group. During the last EY, the guidance document titled "*Kentucky Pre-Application Coordination Process for Coal Facilities.*" was used for

the evaluation of four potential mine sites. The agencies comprising the Interagency Coordination group visited the Middlefork Development mine site and observed the construction of the weep berms for the experimental practice.

AML Program

OSMRE Oversight Inspection of AML Projects: LFO completed 190 oversight inspections of DAML program during EY 2014 and found that the state continues to be successful in achieving lasting and effective reclamation of previously mined lands that eliminates hazards to the public and restores land to beneficial uses. LFO's inspections show that the DAML manages their program in a cost effective and efficient manner, the reviewed projects complied with applicable laws and regulations, are well designed and constructed using the best technology available, and are completed with minimal disturbance to the environment and are well monitored to ensure projects meet contract specifications, project objectives, and program goals.

AML Enhancement Projects: Kentucky has utilized the AML enhancement rule provisions in SMCRA since 1999 to accomplish reclamation at much reduced cost to the AML Fund. In past EY, DAML has completed one project and requested authorization to proceed on three AML enhancement rule projects. During the EY, DAML was authorized to proceed with three new enhancement projects that are estimated to save the AML Fund approximately \$171,000.

AML Water Supply Projects: In EY 2014, DAML completed seven water supply projects and requested and received authorization for nine new water supply projects that propose to upgrade and/or extend existing water supply facilities to provide safe domestic water supplies for 501 new residential customers.

National Measurement Elements

Permit Actions

Kentucky is the third largest coal-producing state in the nation with an annual production of nearly 81 million tons during CY 2013. Kentucky currently inspects 1,748 coal mining permits of which 832 are surface mining permits and 592 are underground mining permits. Coal production from underground mines was more than double that of surface mines.

KYDNR Mine Inspections

During EY 2014, DMRE inspectors conducted 20,722 inspections on 1,748 mine permits. LFO analyzed off-site impact data from DMRE's inspections and the violations cited. DMRE issued 381 enforcement actions that cited 446 measurable off-site impacts on 229 permits. Of the mine sites inspected by DMRE, 87 percent were free of off-site impacts compared to 85 percent in EY 2013.

Bond Releases

DMRE reported that bond releases were granted on 22,706 acres for Phase I reclamation, 5,078 acres for Phase II reclamation, and 12,780 acres for Phase III reclamation. This represents a 56% increase in Phase I bond release acreage over EY 2013 and is most likely as a result of bond increases from changes to the base bond amounts, and closure of many mining operations. Phase II and Phase III bond release acreage decreased 29% and 20% over EY 2013 levels. LFO jointly reviewed a sample of these mine sites with DMRE and conducted 27 Phase I joint bond release inspections and 27 Phase III joint bond releases inspections. LFO found that DMRE is meeting the requirements of its bond release program on permanent program permits.

LFO Oversight Inspections

LFO exceeded the OSMRE REG-8 Directive mandate of 315 complete joint and independent random inspections by over 16%. When adding the other inspections conducted by LFO, the total inspections were 458. The other major types of inspections conducted by LFO include sites with phase III bond release, bond forfeitures, and long term treatment.

Customer Service/ Stakeholder Outreach

Citizen Complaints

The Lexington Field Office (LFO) continues to gather data annually on citizen complaints. Statistics show that over the past 20 years, the number of citizen complaints received each year by KYDNR has reduced by two-thirds. A total of 587 citizen complaints were received in EY 2014. Twelve Ten-Day-Notices (TDNs) were issued by LFO during EY 2014, based on citizen complaints. There were twelve citizen complaints received in EY 2012, and eight in EY 2013.

ARRI Events

LFO, KYDNR and other state agencies, private conservation groups, and coal company personnel participated in an Arbor Day event at a surface mine site with 24 students and 4 teachers from a Bell County elementary school. The student volunteers helped plant 625 experimental American chestnut nuts for The American Chestnut Foundation (TACF) project. KYDNR assisted over 574 volunteers in the planting of 56,715 trees on abandoned legacy sites. KYDNR continues to proactively support the use of FRA on Title V and Title IV mine sites.

Annual Performance Agreement

Prior to the beginning of each EY, LFO conducts outreach to all citizen and industry groups to solicit suggestions on oversight topics for the upcoming year. These suggestions are considered when OSMRE determines the focus and oversight resources necessary to review the State regulatory and AML programs. This information is also used by LFO when negotiating the annual performance agreement with KYDNR. The annual performance agreements are available on OSM's website (<http://odocs.osmre.gov/>). LFO received two comments on the EY 2014 Performance Agreement.

Bonding Program Regulations

In response to OSMRE's 30 CFR 733 letter dated May 1, 2012, the Kentucky Energy and Environment Cabinet (ECC) filed emergency regulations to improve KYDNR's bonding program. The emergency bonding regulations became final on September 28, 2012, and increased base bond amounts, increased the minimum bond, increased bond amounts for embankment sediment structures, increased supplemental assurance, and requires KYDNR to evaluate the bond amounts every two years to determine if they need to be increased.

The EEC also filed emergency regulations to implement the House Bill 66 legislative measures to create, fund, operate, and maintain the Kentucky Reclamation Guaranty Fund (KRGF). KRGF is a reclamation account designed to cover the excess costs of reclamation for coal mining sites when the permit specific bond is inadequate. The fund cannot be used for the long term treatment of substandard water discharges or to repair subsidence damage. The legislation originally was designed to require mandatory participation but was changed in the legislative process to allow a permittee to post a full cost bond in lieu of participating in the fund. Initially two separate program amendments were submitted by KYDNR for each of the regulatory changes. OSMRE published the first program amendment to address

the increases in bond rates in the Federal Register and received comments from industry, environmental and surety groups. OSMRE has combined these into one (KY-256) and is preparing a new advertisement for the combined program amendment.

Notice of Intent to Sue

During the EY, LFO receive two NOIs. The first NOI involved three separate filings and one amendment filed by the Appalachian Citizens Law Center on behalf of the Johnson Family Property, LLC. The NOI alleges that OSMRE failed to take over a portion of the state program, or to require the Kentucky Energy and Environment Cabinet (EEC) to amend their program to meet the requirements of SMCRA and its regulations, and that the approved Kentucky regulatory program engages in a pattern and practice of unlawfully issuing permits in situations where surface ownership is held by tenants in common and the surface ownership has been severed from the mineral ownership. Six of the eight shares of the tract are owned by Johnson Family Property, LLC and the remaining two shares by Pike-Letcher Land Company. The coal company, Premier Elkhorn Coal Company, had leased the right to mine from Pike-Letcher Land Company. The central issue involves established Kentucky property law that, where the mineral and surface estates are severed, allows one surface owner (Pike-Letcher Land Company) to grant the consent to mine even if all the surface owners (Johnson Family Property, LLC) do not agree to the consent as was the issue in this case.

National Priority Review Topics

Adequacy of Kentucky Bond Amounts

One previously conducted National Priority Topic Review was completed in EY 2011 and the final report was prepared in EY 2011 *“Adequacy of Kentucky Bond Amounts.”* This study found reclamation performance bonds in Kentucky are not always sufficient to complete reclamation required in an approved permit. KYDNR and OSMRE signed an Action Plan detailing the steps necessary for correcting identified bond calculation deficiencies. However, the issues raised by the report were not addressed by the action plan and led to a 733 action in May 2012. KYDNR has initiated regulatory reform through increases to existing bond rates and the creation of a new reclamation guaranty fund or bond pool.

General Oversight Topic Reviews

Bond Forfeitures

Bond forfeitures have been studied on an annual basis by LFO since EY 2007. Prior studies have shown an increasing number of bond forfeitures have insufficient bond. LFO and

KYDNR agreed in the Performance Agreement to study permanent program bond forfeitures occurring during EY 2014 (25 permits). LFO completed this study and found that 17 of the 25 permits did not have sufficient bond to complete reclamation. These permits were forfeited under the previous bonding system. LFO has and will continue to work closely with the KYDNR to resolve the bonding issue to make sure that every surface mining bond is sufficient to ensure full reclamation; avoiding the creation of additional forfeitures where possible; avoiding destabilizing the surface coal mining bond market; and maintaining KYDNR's viability as a primacy program.

Oversight Inspections

OSM and KYDNR conducted 331 joint comprehensive random inspections and 35 independent comprehensive inspections, selecting permits currently in an active or reclamation active status for review during EY 2014. Enforcement data, off-site impacts, and compliance statistics were collected on each permit inspected. For EY 2014, OSM found that 68% of the permits issued in Kentucky were in full compliance with all performance standard categories. This is a slight drop in industry compliance compared to EY 2013 which was 70%. The level of industry compliance remains a serious issue. During the EY, DMRE issued 962 non-compliances and cited 1,619 performance standards. This is slightly less than EY 2013 in which KYDNR issued 1,081 non-compliances and cited 1,963 performance standards.

Inspection Frequency Summary

Inspection frequency is a regulatory requirement to conduct inspections on the Kentucky coal mines to meet a certain number or frequency during the EY. KYDNR had an historic rate of over 98 percent of the coal mine meeting inspection frequency. For EY 2014, KYDNR met inspection frequency on 99 percent of Kentucky coal mines. This recovery is attributed to the reduction in active coal mining, utilizing other staff and supervisors being assigned an inspection workload, and emphasis by KYDNR management on the need to meet inspection frequency. For the entire evaluation year, Kentucky inspection frequency has been restored to historic levels.

Grants

During the EY, OSM awarded slightly more than \$45.3 million to Kentucky to fund the Title IV Abandoned Mine Land (AML) and Title V Administration and Enforcement (A&E) Regulatory Programs. The grant cycle for AML begins on July 1st, and the A&E grant cycle begins on September 1st of each calendar year.

Other Studies

Other studies conducted by OSM and not specifically mentioned at this point during the EY include: Long Term Treatment Inventory Sites, Fill Inventory, and Cultural and Historic Resources.

Outstanding Issues

Adequacy of Bond Amounts

OSM oversight and programmatic reviews have found that performance bonds in Kentucky are not always sufficient to complete the reclamation required in the approved permit. On May 1, 2012, the OSM Director sent a letter to Kentucky initiating the Part 733 process. The process will allow Kentucky the opportunity to correct its bonding program deficiencies. In response to OSMRE's 30 CFR 733 letter dated May 1, 2012, the Kentucky Energy and Environment Cabinet (ECC) filed emergency regulations to improve KYDNR's bonding program. The emergency bonding regulations became final on September 28, 2012, and increased base bond amounts, increased the minimum bond, increased bond amounts for embankment sediment structures, increased supplemental assurance, and requires KYDNR to evaluate the bond amounts every two years to determine if they need to be increased.

The EEC also filed emergency regulations to implement the House Bill 66 legislative measures to create, fund, operate, and maintain the Kentucky Reclamation Guaranty Fund (KRGF). KRGF is a reclamation account designed to cover the excess costs of reclamation for coal mining sites when the permit specific bond is inadequate. The fund cannot be used for the long term treatment of substandard water discharges or to repair subsidence damage. The legislation originally was designed to require mandatory participation but was changed in the legislative process to allow a permittee to post a full cost bond in lieu of participating in the fund.

Budget and Staffing

Even though the mining program was spared from the latest State agency cuts, KYDNR still reduced staffing levels during the EY. At the end of the EY 2013, DMP had a budgeted cap of 75 employees, but funding reductions and attrition reduced the level of staffing to 65.. Similarly, the DMRE cap of 161 positions was reduced slightly to 157, and the DAML had a budgeted cap of 98.

Lack of Matching Funds

KYDNR de-obligated \$412,395 from the FY 2013 A&E grant because KYDNR could not match their 50 percent of the Federal grant. KYDNR has attempted to lessen the impacts of not being able to match Federal funds on the inspection and enforcement regulatory program. KYDNR has not replaced vehicles, reduced contracts, cut back on travel and eliminated computer hardware expenditures.

Flyrock from Blasting

EY 2014 flyrock data indicates that while the numbers of flyrock events were significantly reduced, it still remains a concern. There was one flyrock events during this EY that caused rocks to strike an occupied dwelling. This is a lower number of incidents than had occurred in the past few EYs but still remains a concern. KYDNR and OSM recognize flyrock as the most troublesome and potentially dangerous of all off-site impacts in the State and will continue to elevate blasting enforcement, training, and joint studies targeted to reduce blasting effects to citizens.

Industry Compliance

Industry compliance in EY2013 was slightly lower than in EY 2013 (72 percent) with a compliance rate of 68 percent. However, this continues the significant decline of compliance noticed in the last three EYs.

Grants and Technical Assistance

OSM provides financial and technical assistance to Kentucky in several ways.

Training for KYDNR

OSM also supplements KYDNR training with the National Technical Training Program (NTTP) and Technical Innovation and Professional Services (TIPS) training programs and software licensing.

Technical Assistance

LFO provided hydrology assistance to the DMRE to solve ongoing technical problems and provide on-the-job training for their new hydrogeologist. The problem investigations include allegations of: water well contamination, changes to the quality of a mine discharge used as

a water supply, potential connection of an underground mine to an offsite landslide, and adverse mining related impacts to the quantity and quality of the drainage issue on their property.

Federal Lands Cooperative Agreement

OSMRE provides support to KYDNR in their implementation of the Federal Lands Cooperative Agreement. KYDNR has assumed the permitting role for operations that will mine Federal coal or mine on Federal lands. OSMRE assists the US Corps of Engineers, US Forest Service, and the US Bureau of Land Management in the coordination of the permitting activities with KYDNR. OSMRE is also responsible for making determinations of Valid Existing Rights (VER) for KYDNR's use in the issuing of permits. The COE has several projects within the eastern coal field and the USFS manages the Daniel Boone National Forest in eastern Kentucky as well.

Experimental Practices

LFO provides technical assistance on experimental practice applications. During the EY, LFO continued to monitor the experimental practice using "weep berms" at the Middlefork Development mine site.

The preliminary results of this technique were presented by the University of Kentucky and the coal company. The weep berms are designed to improve water quality leaving the mine site.

The Lexington Coal Company also submitted a close-out for the experimental practice that successfully demonstrated that the Forest Reclamation Approach (FRA) could be used on steep slopes.

I. Introduction

The Surface Mining Control and Reclamation Act of 1977 (SMCRA) created the Office of Surface Mining Reclamation and Enforcement (OSMRE) within the Department of the Interior (DOI).

SMCRA provides authority to OSMRE to oversee the implementation of State regulatory programs and provide Federal funding for State and tribal regulatory programs that have been approved by the Secretary of the Interior. The Kentucky Energy and Environment Cabinet's (EEC) Kentucky Department for Natural Resources (KYDNR) is the Regulatory Authority (RA) responsible for administering the approved program in Kentucky.

This report contains summary information regarding the Kentucky (KY) Regulatory and Abandoned Mine Lands (AML) programs and the effectiveness of the Kentucky programs in meeting the purposes of SMCRA. The report covers Evaluation Year (EY) 2014 that extended from July 1, 2013, through June 30, 2014.

The format for this report is established by OSMRE Directive REG-8. REG-8 provides flexibility to OSMRE and KYDNR to be innovative in conducting results-oriented evaluations that meet stakeholder interests and needs. The format is the same as previous years to allow for comparison between years on critical issues.

During the EY, OSMRE and KYDNR develop state-specific oversight plans or performance agreements to identify specific program areas and evaluation methodologies directed toward end-results measurement. The OSMRE Lexington Field Office (LFO), in consultation with KYDNR personnel, incorporated public comments and developed the oversight procedures and special studies for EY 2014. The EY 2014 Performance Agreement was finalized and signed by KYDNR and LFO on June 24, 2013,. This report also covers AML oversight activities as established by OSMRE Directive AML-22.

Detailed background information and comprehensive reports for the program elements evaluated during the period are available for review and copying by contacting Robert S. Evans, Field Office Director at the OSMRE Lexington Field Office, 2675 Regency Road, Lexington, Kentucky 40503 or by emailing bevans@osmre.gov. Topic specific reports report can be found on OSMRE's REG-8 Oversight database at the following address:

<http://odocs.Osmre.gov>. Once at the site select the state of *Kentucky*, the *Annual Evaluation Year (2014)*, and the category filter of *Annual Evaluation Reports*.

II. Overview of the Kentucky Coal Mining Industry

Kentucky is the third largest coal-producing state in the nation, with an annual production of approximately 80.6 million tons during Calendar Year (CY) 2013 or approximately 8.2 percent of the coal produced in the US. This represents an additional 12.5% decline in annual coal production as compared to CY 2013."Of this total surface and underground mining produced approximately 25.6 and 55.5 million tons, respectively. This represents approximately 4.53 percent of the nation's surface mined coal and 16.30 percent of the underground mined coal. KY was the nation's leading coal producer until CY 1988; holding that position for over a decade until the production from Wyoming and West Virginia exceeded that in Kentucky. Kentucky's coal production has steadily decreased from the late 1990's through this EY. To illustrate this decline, the number of actively producing coal mines at the beginning of the EY was compared to the number actively producing at the end of the EY. KYDNR observed an approximate 3 percent reduction of coal mines producing coal from beginning of this EY to the end.

Due to the differing coal bearing regions within the State, nearly every type of coal mining and reclamation practice is found. Kentucky's coal reserve base, the fifth largest in the nation, consists entirely of bituminous coal. The Eastern Kentucky Coalfield is part of the Appalachian Coal Province where underground, contour, and mountaintop mining occurs. The Western Kentucky Coalfield is part of the Interior Coal Province (Illinois Coal Basin) where area and underground mining occurs. During the CY 2013 Western Kentucky produced more coal than Eastern Kentucky and Union County produced the most coal of all the counties.

KYDNR currently inspects 1,748 coal mining permits of which 832 are surface mining permits and 592 are underground mining permits. The remaining 324 permits are roads, preparation plants, and refuse disposal areas. The chart below shows the numbers of permits on a bar chart through time.

The number of permits and correspondingly the number of inspectable units have been declining over time. The following chart shows the overall decrease in permit and inspectable units over the past 29 years. The graph exhibits a sharp decline between EY 1985 and EY 1990 and continues a pronounced rate of decline from EY 1990 until EY 2005

when the trend stabilizes indicating little variation in the total number of permits. Since EY 2010, the total number of permits (average 1830) has steadily declined with EY 2014 exhibiting a 4.5 percent decrease from this average with 1748 total permits. Surface mine permits (average 871) follows a similar declining trend with minor variations including the

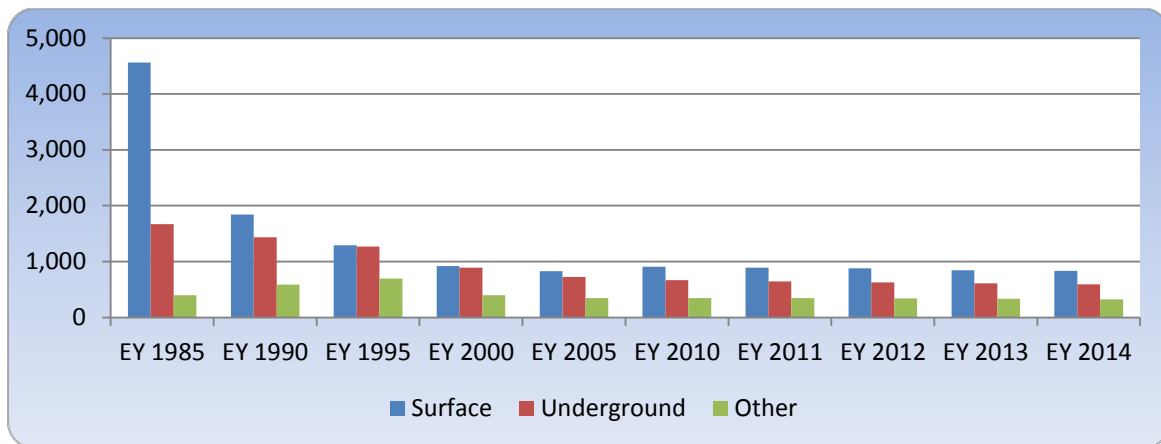
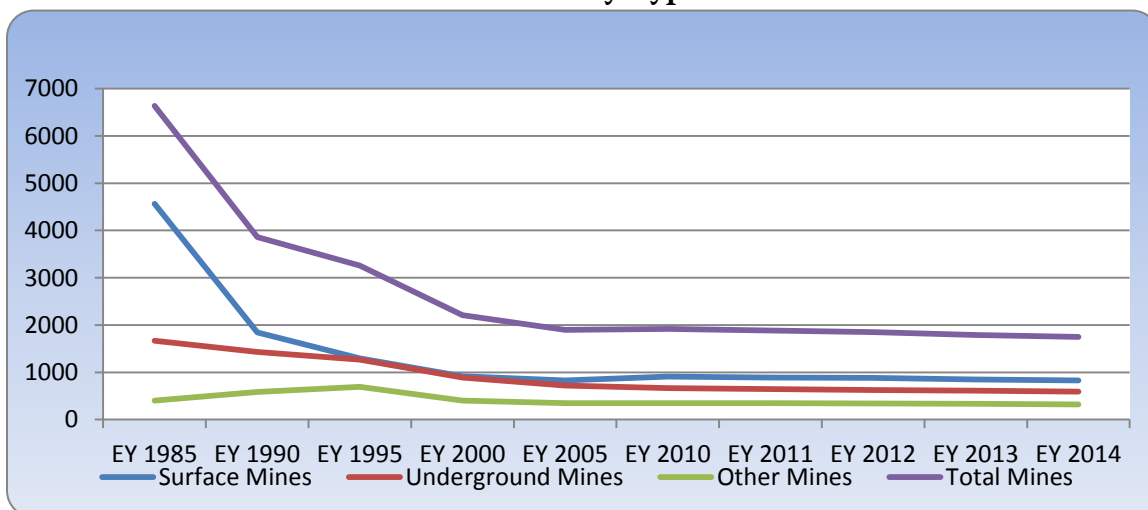


Chart showing number and type of permits from for selected years 1985 to present.

low value of 832 permits during EY 2014. Underground mine permits gradually decreased from EY 1985 through EY 2005 when the trend stabilized. Since EY 2010, underground mine permits (average 629) have steadily decreased in amount with the low value being 592 permits in EY 2014. Other permits increased from EY 1985 through EY 1995 when they started to decline through EY 2005. From EY 2010 to EY 2014, all other facility type permits averaged 339 with EY 2014 having a low value of 324 permits.

Permits by Type



Line graph showing the decrease in the number of permits through time.

The information for inspectable units is captured in Table 2 in the Appendix provided by OSMRE and KYDNR. In KYDNR's Table 2, the total number of inspectable units is calculated by adding the permanent program permits and initial sites for a total of 1,748. In OSMRE's Table 2, the total permanent program permits and initial sites, also includes bond forfeitures which gives a total of 1842.

In contrast to the decreased number of mine permits, coal produced from underground mines has steadily increased over coal produced from surface mines. Presently, underground mines account for approximately three quarters of the permitted acres in the State, in contrast to two thirds of the permitted acreage in EY 1990. The high percentage of acreage is due to the KYDNR regulatory requirement that the shadow area overlying the underground works be permitted. In EY 2013, KY DNR reported a total of 1,453,402.572 permitted underground acres compared to a reported 1,492,202.976 permitted acres in EY 2014, an increase of 38,800.404 acres. However, most underground mines actually disturbed very little surface acreage. During EY 2014 the total disturbed acreage from coal mining in Kentucky was 242,649 acres but only a small amount was due to underground mining. In EY 2013, 25,144 disturbed acres (approximately 10 percent of total disturbed acres) were attributed to underground mines. This amount of underground disturbed acreage had not change significantly during EY 2014. Both the number of permitted underground mine acreage and disturbed underground mine acreage have gradually increased over the past two decades.

The following table depicts the permitted acreage for underground mines in Kentucky and the gradual increase in disturbed acreage over time through EY 2013.

Underground Mines Permitted Acreage	EY 1990	EY 1995	EY 2000	EY 2005	EY 2010	EY 2011	EY 2012	EY 2013
< 20 Acres	N/A	2%	2%	1%	1%	1%	1%	1%
20-99 Acres	N/A	13%	7%	4%	3%	2%	3%	3%
100 Acres or >	N/A	85%	91%	95%	96%	97%	96%	96%
Underground Mine Surface Disturbance	EY 1990	EY 1995	EY 2000	EY 2005	EY 2010	EY 2011	EY 2012	EY 2013

Acreage								
< 20 Acres	88%	79%	71%	70%	67%	67%	66%	65%
20-99 Acres	10%	18%	23%	24%	26%	26%	27%	27%
100 Acres or >	2%	3%	6%	6%	7%	7%	7%	8%

Table showing size ranges for underground permitted and surface disturbed acreages.

Surface mines and associated facilities (haul roads and preparation plants, etc.) now account for approximately one quarter of the acreage permitted in Kentucky in contrast to one third of the permitted acreage in EY 1990. During EY 2013, KY DNR reported a total of 512,791.860 permitted surface acreage compared to a reported 507,966.880 during EY 2014, a reduction of 4,824.98 acres. Although the total acres permitted for surface mining have been declining, the size of the individual surface mine permits has been increasing. In EY 2011, two thirds of surface mines were over 100 acres in size as compared to EY 1990 where only one third were greater than 100 acres. The table below depicts the permitted acreage for surface mines in Kentucky and the gradual increase in the size of individual mines over time through EY 2013.

Surface Mines Permitted Acreage	EY 1990	EY 1995	EY 2000	EY 2005	EY 2010	EY 2011	EY 2012	EY 2013
< 20 Acres	28%	18%	14%	14%	11%	11%	11%	11%
20-99 Acres	36%	30%	25%	23%	23%	22%	21%	21%
100 Acres or >	36%	50%	61%	63%	66%	67%	68%	68%

Table showing the surface mine permitted acreages grouped by size categories through time.

The following table further illustrates the trend of increasing numbers of surface mines above 100 acres by size through EY 2013.

Table showing the percentage of surface mine permitted acreages grouped by expanded size categories through time.

Permitted Acreage	Number of Surface Mines					Percent of Total Surface Mines				
	EY 2005	EY 2010	EY 2011	EY 2012	EY 2013	EY 2005	EY 2010	EY 2011	EY 2012	EY 2013
100-250	230	245	236	237	227	20%	20%	20%	20%	20%
250-500	213	232	231	231	222	18%	19%	19%	19%	19%
500-1,000	180	196	207	212	212	15%	17%	17%	18%	18%
> 1000	107	124	132	133	132	9%	10%	10%	11%	11%
Total	730	817	806	813	793					

III. Overview of the Public Participation Opportunities in the Oversight Process and the State Program

Prior to the beginning of each EY, the LFO conducts outreach to all citizen and industry groups soliciting suggestions on oversight topics for the upcoming year. On May 7, 2013, the draft EY 2014 Performance Agreement was e-mailed to several Federal and State agencies, environmental groups, and representatives of coal industry for input. The suggestions are considered in determining where OSMRE will focus its oversight resources and what aspects of the State regulatory and AML program will be reviewed. Only the KYDNR provided any feedback. This agreement includes joint and independent OSMRE oversight inspections as well as joint special studies on selected components of the State's program including oversight of the KYDAML. The final EY 2014 performance Agreement was finalized on June 24, 2013. This information is available to the public at the OSMRE website link <http://odocs.osmre.gov>. Website visitors should choose the appropriate state, year, and Annual Performance Agreement in appropriate selection fields. Both the draft and the final versions of the EY 2014 Performance Agreement are located on this webpage.

The enactment of SMCRA created many avenues for citizen involvement. Citizens have a statutory role in practically every phase of the surface mining program, from permit issuance to bond release. Since SMCRA's enactment in 1977, coalfield citizens have used those rights to help shape virtually all policies and programs that govern surface coal mining and reclamation in America.

Kentucky has several citizen organizations that take part in public participation opportunities regarding coal mining issues: Kentuckians for the Commonwealth; Kentucky Resources Council; Kentucky River Keeper; Kentucky Waterways Alliance; Ohio Valley Environmental Coalition; Sierra Club; Alliance for Appalachia; Appalachian Citizen's Law Center; Appalachian Mountain Advocates; and Appalachian Voices. These groups are active in SMCRA issues as well as issues associated with Section 404 of the CWA. The Heartwood citizen's group has also been active on issues concerning mining operations on USFS property.

In addition to citizen group participation, industry groups also provide input to the oversight process. There are three major coal associations in Kentucky: the Kentucky Coal Association; the Western Kentucky Coal Association; and the Coal Operators and Associates, Inc. Other Pro Industry groups active in the regulatory process are Friends of Coal and Faces of Coal.

IV. Major Accomplishments

A. Cumulative Hydrologic Impact Assessments (CHIAs)

SMCRA requires a Cumulative Hydrologic Impact Assessment (CHIA) for each permit application for surface and underground mining operations, as well as any amendments or revisions to permits that effect hydrology. The permit specific assessment gauges potential impacts to water quality from the proposed mining operation at the Hydrologic Unit Code (HUC)-12 watershed scale. In the past four years, KYDNR has made significant advancements in the preparations of CHIAs through data entry and the establishment of CHIA trend stations. The establishment of trend stations at the mouth of HUC-12 watersheds has allowed KYDNR staff to quickly assess water quality at these locations. Additionally, trend station sampling events include parameters (i.e. heavy metals) which are not otherwise included in other KYDNR databases, allowing consideration of these parameters, which may have in-stream standards.

When conducting an assessment, up to 10 separate databases are consulted for each permit specific report, these include data from the CHIA trend stations, the Surface Mining

Information System (SMIS), Storage and Retrieval Warehouse (STORET), Kentucky Geologic Survey (KGS), Division of Water (DOW), Abandoned Mine Lands (AML) as well as macroinvertebrate sampling that may have been conducted as part of the permitting process.

Water quality data are summarized and median values are determined. Watersheds in which atypical annual median values are identified, or watersheds where warm water aquatic standards are exceeded, trigger additional investigation. A secondary analysis may be performed to consider (depending on the nature of the atypical values), more specific reviews of ground cover conditions/changes, mining history and geology, population density and/or changes, or other factors within the watershed that might impact the hydrologic balance. Results that may merit consideration at the permit review level will be referred to DMP management for consideration. If it is determined that the addition of another permit would result in a cumulative effect that approach the level of material damage, the permit should be sent back to the applicant for design modifications or deferral to the KPDES process for appropriate limits.

Improvements to the CHIA process this EY include moving baseline water quality data from an appendix, to the water quality section of the report; replacing “median and “range of data” calculations by the minimum, Q1, median, Q3 and maximum values to better describe the spread of data, as well as the addition of macroinvertebrate sampling data.

Data used by KYDNR in making CHIA determinations is available online from the KYDNR CHIA website (<http://minepermits.ky.gov/Pages/CHIA.aspx>). Monthly updated CHIA data packages are available for download. The data is organized by the HUC-12 watershed code and includes surface water quality, benthic information, mine history and information regarding potential mines.

B. Trend Station Data

During this EY, KYDNR continued monitoring of the CHIA Trend Stations, which were established using several OSMRE Cooperative Agreement Grants totaling \$485,000. Establishment of the trend stations at the mouth of select HUC-12 watersheds has allowed KYDNR to characterize water quality conditions in the eastern and western Kentucky coalfields. The stations provide an avenue for scientific evaluation of the cumulative effects of mining and other activities within watersheds over time. The first trend station sampling event occurred in July 2011, subsequent events have continued quarterly. The most recent sampling event completed 10 quarters of sampling. In total, 132 trend stations have been

established; 116 in the eastern coalfields and 16 in the west. Trained teams of environmental inspectors perform the sampling events, with 18-25 inspectors participating in any given quarterly event. During the sampling events, field measurements for pH, conductivity, water temperature and stream flow are collected at each station. Laboratory analysis of water collected is conducted at the Kentucky Department for Environmental Protection's laboratory. Analytes include acidity, alkalinity, chloride, hardness, TSS, TDS, sulfate, calcium, iron, magnesium, potassium, sodium, aluminum, arsenic, cadmium, copper, lead, manganese, nickel, selenium and mercury. Analytical and field analyses from the quarterly events are uploaded to KYDNR's trend station website (<http://minepermits.ky.gov/Pages/Watershed-Trend-Station-Data.aspx>) where it is available to all stakeholders.

At the end of this EY, \$428,698 of the original OSMRE Cooperative Agreement Grants have been exhausted on laboratory analysis, sampling personnel, equipment, statistical software and fish and benthic surveys. Laboratory analysis of the quarterly water samples has been the most costly part of the project, with \$267,123 spent on analysis alone. The remainder of the original funding is scheduled to be depleted by September 2014. Once this occurs, KYDNR will continue the project using court-ordered monetary judgments matched by OSMRE funding.

C. OSMRE Youth Initiative – Student Internships

KYDNR continues to be an enthusiastic participant in the OSMRE Youth Initiative. The initiative is aimed at encouraging students to consider careers in mining and reclamation related fields through their work opportunities in the State regulatory environment. The students would be carefully supervised and mentored to provide an enriching learning experience. KYDNR and OSMRE have partnered with the OSMRE Youth Initiative Student Intern Program MOU from June 2010 through December 2013. OSMRE had provided \$188,888 to KYDNR to employ 16 student interns who each worked 3-9 months depending on their school schedule. During FY 2013 the funds used for internships depleted and no interns were acquired after the funding expired.

In previous years these interns were hired based on their experience, knowledge and education in the disciplines of geology, hydrology or other related natural science fields. It was also desired for the interns to have strong backgrounds in computer-related skills as well as an ability to write technical reports. Historically, the tasks assigned to these students ranged from the compellation and recording of historical water quality data; writing watershed assessments, describing land uses (past, present, and anticipated mining); and assist with various GIS projects related to CHIA. Additionally, they created a databases for

biological reporting, wrote and updated watershed characterization reports,; and assisted in the collection and transport of water samples from the five KYDNR regional field offices to a centralized laboratory.

The students involved in the OSM Youth Initiative have significant contributions to the state program. They are as follows: Entered 131,098 surface/ground water monitoring reports and pre-mining baseline reports; entered 92,964 discharge (during mining) monitoring reports; and, wrote and updated 504 watershed characterization reports. A total of over 1.7 million bits of data were added to the KYDNR surface mining database which will enable the agency to review and predict water quality trends in the eastern and western coalfields of Kentucky.

D. Reforestation

OSMRE oversight inspections and program reviews have shown that KYDNR is increasing reforestation efforts on Title V permitted acres and Title IV projects. The KYDNR continues to maintain a strong relationship with the Appalachian Regional Reforestation Initiative (ARRI) by encouraging Title V mine operators to provide sites for ARRI science partner research and demonstrations of the Forest Reclamation Approach (FRA), as well as fostering the FRA with land owners and permittees. The KY DAML also continues to seek ways to use the FRA reforestation on Title IV projects when possible.

The KY DAML Oriole reclamation project, which was authorized in FY 2013 in Western Kentucky, has now expanded the use of FRA reforestation on KY DAML projects to both coal regions of the state. An additional KY DAML western Kentucky project, the Andrews Run Project, is also proposed to use the FRA reforestation methodology and will be authorized before the end of EY 2014. The Andrews Run and Oriole AML reclamation projects will transform 43 acres of previously unproductive lands to high value hardwood forests. The KY DAML also authorized 1 refuse enhancement project during EY 2013 and completed 3 enhancement projects that have transformed 25.2 acres from abandoned refuse disposal waste sites to high value hardwood forest.

The joint KYDNR and OSMRE FRA/RAM 124 training workshops provided to the Division of Mine Reclamation (DMRE), Division of Mine Permits (DMP), and the KY DAML staffs during 2013 continue to prove to be successful as can be seen from oversight inspection observations, discussions with mine operators, and KY DMRE inspectors' performance on RAM 124 permits.

Newly permitted acreages CY 2013: ARRI's Appalachian Region state partners provide data to the OSMRE in response to the U.S. Department of the Interior, Office of Inspector General (OIG) on newly permitted mine sites using the FRA. KYDNR reported that during calendar year (CY) 2013, 173 total permitting actions were approved on 122,677.3 newly permitted acres. Of that total, the mining companies committed to reclaiming 17 permits and 2706.18 acres using RAM 124 methodology. Assuming a planting rate of 680 trees per acre and 100 percent survivability, those newly permitted acreages would result in the establishment of approximately 1,840,202 new trees, provided that the permittees follow through on the existing plans. Using the same projection criteria, combining all newly permitted (RAM 124 and Non-RAM 124) forest land Post Mining Land Use (PMLU) acres, 2706.18 and 35,337.62 acres respectively, the total tree count increases substantially to approximately 25,869,783 new trees that will be planted in the future. Those totals represent that 29% of the newly permitted acres will be returned to forestland.

Bond Released Acreages CY 2013: During calendar year 2013, KYDNR granted Phase III bond release (complete release) for 97 forest land PMLU permits on 7040 acres. That acreage represents a decrease of approximately 563 acres of Phase III released acreage from CY 2012. Of the 7040 released acres, 1440 acres were RAM 124\FRA acres. Using Phase III bond release standards for RAM 124\FRA forest land of 450 trees\acre, the total number of surviving RAM 124\FRA trees is 648,000 and the total number of trees on all forest land PMLUs is 3,168,000 surviving trees.



*Student Volunteers at a 2014
Green Forests Work Event in Pike County*

KYDNR continues to support their partnership with Green Forests Work (GFW) through volunteer work. During EY 2013, KYDNR partnered with GFW to coordinate, assist, and help volunteers plant high value hardwood seedlings on 14 tree-planting projects/events on 2 legacy mine sites in Eastern Kentucky. During the events, KYDNR assisted over 574 volunteers that planted approximately 56,715 trees converting 81.9 acres of abandoned grassland reclamation to high value hardwood forest. Of the 574 volunteers, 312 of the volunteers were 24 years or younger. This outstanding accomplishment was reported to the "Let's Move Outdoors" initiative promoted by First Lady, Michelle Obama.

The KY DMRE Arbor Day Event on April 26th was held at an active surface mine in Bell County. The event was attended by company personnel and several KYDNR sister agencies. The featured group of the event was 24 sixth grade students and 4 teachers from the Right Fork School in Bell County. The OSMRE assisted the KY DMRE, teaching the students and teachers in the planting of 625 experimental American chestnut nuts that are part of an experimental project of The American Chestnut Foundation (TACF) that will assess progeny success for future selections of American chestnut seeds that will be planted on mine sites throughout Appalachia. The students planted the nuts and then recorded pertinent data of the plot.



Right Fork School Students planting experimental American chestnuts Arbor Day 2014



American Chestnut first year growth on the FRA Kinzer KY DAML Project Breathitt County

The KY DAML broadened the use of the FRA during EY 2013 to Western Kentucky, when the 35 acre Oriole project and the 3 acre Andrews Run project in Hopkins County were authorized. The 2 projects will reclaim 43 acres of previously abandoned, non-productive land to healthy, high value hardwood forests. The use of the FRA by the KY DAML design branch has now expanded the FRA to both coal mining regions of Kentucky, which continues to fulfill the commitment made by the KY DAML in the 2013 Performance Agreement to encourage and explore reforestation efforts on AML reclamation projects.



Oriole Reclamation Project Soil Redistribution From

The OSMRE ARRI team members met with the Oriole and Andrews Run contractors prior to the start of the projects and instructed the contractors' staff on the 5 primary steps of the FRA. The photograph (on left) of the Oriole soil medium end dumping operation illustrates steps 1 and 2 of the FRA and demonstrates the success of the pre-project briefing.

One additional success in the reforestation success came with the successful experimental practice at the Lexington Coal Company 17 West mine site that demonstrated that the FRA approach could be used for steep slopes. FRA allowed for hardwoods to be planted while minimizing erosion and sediment contributions.



LCC 17 West experimental practice portion of the mine site showing tree survival and growth.

V. Success in Achieving the Purposes of SMCRA

During the EY, oversight activities and special studies are conducted to gauge KYDNRs success in achieving the purposes of SMCRA. The following are highlights of studies and general oversight findings made throughout the year.

A. Off-site Impacts

KYDNR's program for protecting the public and the environment from off-site impacts is evaluated by collecting and analyzing known off-site damages from surface and underground coal mining permits in Kentucky. During the EY, KYDNR supplies LFO with all non-compliances (NC) and Cessation Orders (CO) and associated inspection reports that contained off-site impacts. LFO analyzes this information and documents the magnitude and root cause of off-site impacts.

During EY 2014, KYDNR issued 962 NCs. These NCs cited 1,619 performance standards. This is a decrease in enforcement actions from the EY 2013 report that showed 1,081 NCs citing 1,963 performance standards. A complete listing of enforcement actions (by company name and alphabetically) issued by KYDNR is found in Appendices C and D. A breakdown of the cited performance standards are listed by totals and percentages in the following table:

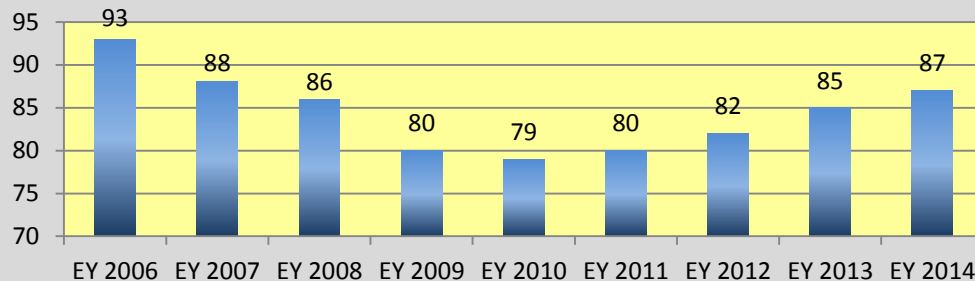
Table 1: Performance Standards Cited During EY 2014					
Performance Standard	Total Amount	Total by Percentage (Approx.)	Performance Standard	Total Amount	Total by Percentage (Approx.)
Water Monitoring	354	22%	Revegetation	26	2%
Sedimentation Control	174	11%	Disposal of Non Coal Waste	21	1%
Off Permit Disturbance	145	9%	Use of Explosives	18	1%
Water Quality	134	8%	Liability Insurance	11	1%
Impoundments	76	5%	Ownership and Control	11	1%
Effluent Limitations	74	5%	Subsidence	11	1%
Backfilling and Grading	69	4%	Coal Waste Dams	10	1%
Disposal of Excess Spoil	66	4%	Mining Off Permit U/G	6	0.40%
Method of Operation	62	4%	Drilled Holes	3	0.20%
General Hydrologic	56	3%	Surface and Ground Water	2	0.10%
Roads	55	3%	Disposal of Coal Processing	2	0.10%
Other Permit Conditions	53	3%	Post Mining Land Use	2	0.10%
Diversions	52	3%	Topsoil	1	0.10%
Contemporaneous Reclamation	49	3%	Other Facilities	1	0.10%
Steep Slopes	38	2%	Flyrock	1	0.10%
Signs and Markers	36	2%			

KYDNR issued 316 NCs that contained off-site impacts. The 316 enforcement actions identified 381 measurable off-site impacts. The determination of off-site impacts was based on KYDNR's documentation and the LFO reviewer's interpretation of the enforcement language used in the inspection reports associated with the enforcement action. The LFO reviewer may contact the issuing KYDNR inspector for information.

The 316 enforcement actions with off-site impacts involved 229 permits representing approximately 13 percent of the 1,748 inspectable units (permits). The remaining approximately 87 percent of the 1,748 permits were free of off-site impacts. The NCs with off-site impacts were analyzed for type of incident, resource affected, degree of impact, and root cause.

As can be seen in the chart below, the trend of number of permits free of off-site impacts in recent years has been declining since EY 2006, with an increase since EY 2010.

**Chart: Percent of Mine Permits
Free of Offsite Impacts**



Of the 381 measurable off-site impacts, 35 percent were for hydrology, 39 percent were for land stability, 18 percent were for encroachment, 6 percent were for other (including public roadway affect) impacts, and 2 percent were for blasting.

From the data collected, the total impacts from coal mining operations for the EY included 41.72 miles of streams; 393.48 acres of land; 7 wells; and 35 structures. The findings for off-site impacts indicate that approximately 54 percent of the measured incidents involved land, 36 percent involved water, 9 percent involved structures, and only 1 percent involved people. The majority of impacts were minor, making up 86.6 percent of the total, 7.6 percent of the incidents were considered moderate, and 5.8 percent were considered major incidents. The root cause of 72 percent of the impacts was attributed to operator negligence, unanticipated natural events (such as flooding) constituted 7 percent, improper maintenance was the reason for 14 percent, improper permitting activities caused 2 percent, and improper construction techniques accounted for the remaining 5 percent.

B. Reclamation Success (I&E)

Successful mine reclamation restores all land disturbed by a surface and underground coal mining operations to an equal to or greater land use than pre-mining. Performance bonds are collected to ensure that the operator conducts the mining and reclamation in a manner that will achieve this goal. The Kentucky program uses a phased bond release system to allow permittees to reduce the bond amounts as certain phases of reclamation are successfully achieved. Phase I requires that the disturbed area be backfilled, graded, topsoil spread, seeded, mulched, and have sediment control. The permittee must also submit a planting report. Phase II requires the reclaimed areas to have established vegetation in

accordance with the approved reclamation plan and meet the standards for re-vegetation success. The reclaimed area must not contribute suspended solids to stream flow or runoff outside the permit area. Phase III requires that: 1) the reclaimed area successfully meets all surface coal mining and reclamation standards in accordance with the approved reclamation plan, 2) the reclaimed land must be capable of supporting the approved PMLU requirements, and 3) the applicable liability period must have expired.



A PIII inspection in progress on permit 861-0441 in Knox County, KY

In Appendix B, Table 6, KYDNR reported for EY 2014 that it granted the following bond releases: Phase I – 22,706 acres, Phase II – 5,078 acres, and Phase III – 12,780 acres. OSMRE reviewed 52 of these mine sites through joint inspections on Phase I and Phase III bond releases and found that KYDNR is meeting the requirements of its bond release program on permanent program permits. KYDNR, in EY 2014, administratively released 15,344 acres. These administrative releases include areas that were not mined. During the EY, the amount of administrative releases dramatically increased. This appears to be in response to both increases in bond amounts and a shrinking coal market.

1. Phase I Bond Release

Twenty-seven Phase I bond released mine sites were inspected as part of OSMRE's random oversight inspection program. The purpose of these inspections is to determine if all applicable bond release standards were met at the time the Phase I bond release was granted by KYDNR. OSMRE found that KYDNR is meeting its requirements for Phase I bond release on permanent program permits.

2. Phase III Bond Release

Twenty-five Phase III bond release inspections were conducted jointly with the KYDNR inspector and the bond release specialist. OSMRE found that KYDNR is meeting the requirements for Phase III bond releases on permanent program permits.

3. Contemporaneous Reclamation

Contemporaneous reclamation was identified and evaluated in 2003 and then again on 2011 to determine if the KYDNR had improved their process. According to the 2011 study, KYDNR addressed the EY 2003 oversight findings. KYDNR is monitoring the contemporaneous reclamation variance during field inspections.

An evaluation of the compliance data collected by KYDNR and OSMRE was evaluated for this year's annual report. In their I&E practices, the State uses both contemporaneous reclamation (CR) and backfilling and grading (BG) codes to cite contemporaneous reclamation non-compliances. The value for each category of non-compliance was combined to get a total to represent worst case conditions.

Evaluation of State Compliance Data: The KYDNR wrote 962 non-compliances citing 1,619 violations. Of these violations, 49 were denoted as CR and 69 as BG. The combined total of 118 represents only about fourteen percent of the total violations written by KYDNR for this EY. The State also reported that they received 506 citizen complaints during EY 2013. Of those complaints one was investigated for CR. The citizen complaint investigation found that the mine was not in violation of the contemporaneous performance standard.

Evaluation of OSMRE Compliance Data: OSMRE conducted 318 comprehensive inspections this EY and observed 288 violations. Of those violations only 22 were attributed to CR. This represents approximately thirteen percent of all violations observed by OSMRE on comprehensive inspections for the EY.

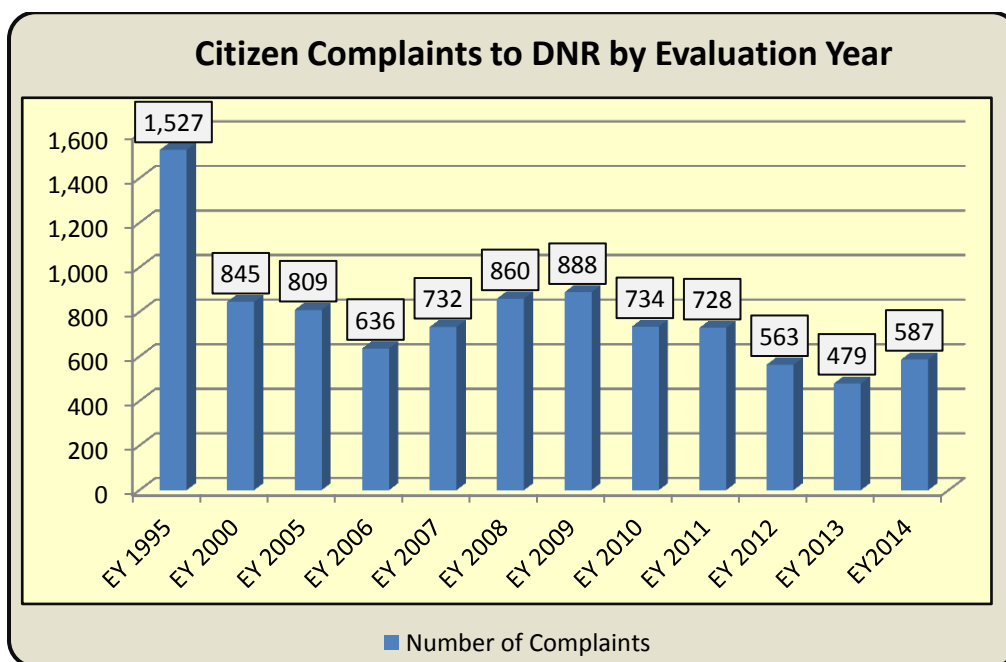
C. Customer Service

1. Citizen Complaints

At the beginning of EY 2013, KYDNR had 81 pending citizen complaints (ongoing investigations). An additional 506 citizen complaints were received during EY 2014 for a combined total of 587 complaints. In this EY, KYDNR investigated 471 and responded to 468 of those complaints. As of June 30, 2014, 99 actions were pending on citizen complaints. In percentages, the top five complaints received this EY were Off Permit Disturbance (OD), 122 or 21.40%; Use of Explosives\Blasting (UE), 108 or 18.94%; Hydrologic Balance (HR), 89 or 15.08%; Water Quality\Effluent (WQ, EL), 51 or 8.94%; Air Resources Protection\Dust (AP), 40 or 7.01%. These top five categories made up 407 of the 570 performance standards affected or 71.37% percent of all the performance

standards received on the complaints. KYDNR issued 53 notices of non-compliance (NNC) on investigations that were conducted on citizen's complaints during EY 2014.

The number of citizen complaints received by KYDNR has remained relatively consistent for the past ten evaluation years, but is down dramatically from that seen in the 1990s. During EY 2014, KYDNR received slightly more citizen's complaints than in EY 2013 (587 vs 479); however that total is still less than the years preceding EY 2012. This still indicates a positive trend. The following chart shows the number of citizen complaints received annually EY 2005. Data for EY 2000 and EY 1995 were also included to illustrate the downward trend.



2. Notice of Intent to Sue

A Notice of Intent to sue (NOI) is a citizen suit authorized by Section 520 of SMCRA. During the EY, LFO received NOIs dealing with two different cases. The first NOI involved three separate filings and one amendment filed by the Appalachian Citizens Law Center on behalf of the Johnson Family Property, LLC. The NOI alleges that OSMRE failed to take over a portion of the state program, or to require the Kentucky Energy and Environment Cabinet (EEC) to amend their program to meet the requirements of SMCRA and its regulations, and that the approved Kentucky regulatory program engages in a pattern and practice of unlawfully issuing permits in situations where surface ownership is held by tenants in common and the surface ownership has been severed from the mineral

ownership. The Johnson Family Property, LLC, owns 62.5% interest in the surface of a tract that was included in the Premier Elkhorn Coal Company surface mine permit. Two of the eight Johnson heirs sold their surface interests (25%) to the Pike – Letcher Land Company, a land company affiliated with Premier Elkhorn. The central issue involves established Kentucky property law that, the mineral and surface estates are severed, allows one surface owner to grant the consent to mine even if all the surface owners do not agree to the consent as was the issue in this case. In a temporary injunction ruling, the Federal District court ordered Premier Elkhorn Coal Company to immediately cease mining and for OSMRE to conduct a federal inspection and report back to the court.

The second NOI was filed by the Joe F. Childers and Associates on behalf of the Hatton family. The NOI against Frasure Creek Mining, LLC, asserts that surface water discharges from the permit area continues to cause damage when material washes onto the Hattons' property. They also allege Frasure Creek failed to reclaim the permitted area in a timely manner.

3. Interagency Coordination

KYDNR and LFO are active participants in the Interagency Clean Water Act Coordination efforts. Agencies involved include EPA, COE, USFWS, DOW, and Kentucky Department of Fish and Wildlife Resources (KDFWR). KYDNR hosts meetings of the staff level interagency workgroup and is an active contributor to that group. During the end of the last EY, a staff level work group completed a guidance document titled *“Kentucky Pre-Application Coordination Process for Coal Facilities.”* Goals for Pre-Permitting Coordination include:

- Reduce the cumulative time required for review of permit applications for SMCRA, CWA 402 and 404 permits, and 401 WQC;
- Eliminate unnecessary re-design and re-review of mine plans by identifying constraints up front;
- Consolidate pre-permitting sampling and laboratory analysis efforts to reduce time and expense to the applicant;
- Identify critical resources or other features that will require further characterization (survey, documentation) or special consideration in the mine plan;
- Obtain COE verification of the applicant's proposed jurisdictional determination prior to submittal of the SMCRA comprehensive application for FPOP fill design; and

- Assure consistency of information provided to all agencies to avoid approval of conflicting permits.



Weep berm under construction at Middlefork Development mine site.

KYDNR is an active participant in the Quarterly Interagency Fill Meetings hosted by the OSMRE LFO. All Federal and State agencies with an interest in CWA permitting, especially in excess spoil disposal, attend and participate in these meetings. There were two of these meetings held during EY 2014. One of the meetings was held at Natural Bridge State Park and provided an opportunity for a field visit to the Middlefork site to observe the weep berm construction process. The “weep berm”

experimental practice continues to hold keen interest by the agencies for use as a best management practice (BMP). OSMRE approved the Middlefork Development Corporation permit number 877-0191 “weep berm” experimental practice in spring 2013.

4. Clean Water Act

During the EY, there continued to be increased scrutiny by the EPA regarding CWA 402 and 404 permits. An increasing number of KPDES watersheds and receiving streams now require an individual (IP) permit instead of a general permit and require additional time for issuance. The delay in issuance of individual KPDES permits causes concern that coal mine operators may start (or continue) mining operations without an approved KPDES permit – especially in areas previously issued general permit for mining operations.

KYDNR is aware of the problem and has implemented a comprehensive review of SMCRA permits in coordination with the Kentucky DOW to make sure that mining operations do not begin operating until all permits have been issued.

KYDNR requires that coal mine permittees obtain a KPDES permit prior to disturbance. During EY 2014, there was one non-compliance written for failure to obtain a KPDES permit; this was down from six in EY 2013 and 11 in EY 2012.

The current KPDES coal general permit expires on July 31, 2014, but will be replaced by two new coal general permits —designed for the eastern and western coalfields — due to topographic, geologic, and hydrologic differences in Kentucky’s two coalfields. Changes to the permit include several new water quality based requirements such as Whole Effluent Toxicity (WET) testing, monitoring and effluent requirements for total recoverable selenium, fish tissue analysis for selenium residue when the monthly average effluent

exceeds 5 µg/l total recoverable selenium, and monitoring for specific conductance and total sulfate. DOW is also changing the procedures and requirements for moving from active mining effluent limitations and monitoring to reclamation area effluent limitations and monitoring. Previously this change was affected upon Phase I bond release. In the new general permits, the change is on a pond by pond basis. Other changes include the mandatory electronic submission of forms such as the notice of intent (NOI) for coverage and discharge monitoring reports (DMRs). The NOI is now an electronic NOI or eNOI that is completed and submitted online. DMRs will also be completed and submitted online through EPAs NetDMR tool.

5. Threatened and Endangered Species

KYDNR continues to coordinate with the USFWS on permitting for surface coal mine and reclamation operations to meet SMCRA requirements for fish and wildlife resources in Kentucky coal fields. During EY 2014, KYDNR worked to improve coordination over aquatic threatened and endangered species, such as the Northern Long-Eared Bat. On June 20, 2012, at the end of EY 2012, OSMRE LFO signed a Local Interagency Coordination Agreement (LICA) with Federal and State Agencies. The LICA was signed by other federal agencies including the COE, EPA, US FWS and with state agencies including the KYDNR and DOW. The purpose of this LICA is to improve agency communication and coordination associated with all aspects of the permitting processes, compliance and enforcement associated with coal mining activities in Kentucky under the respective state and federal reviews required by the CWA, SMCRA, and ESA. The goal of the LICA process is that all of the permitting agencies will have their concerns addressed before SMCRA and 402/404 CWA permits are issued.



In November 2010, the USFWS announced in a Federal Register that the Kentucky Arrow Darter was a “Candidate Species” for listing as a Threatened and/or Endangered Species. The listing process is planned to begin in 2015. The Kentucky Arrow Darter is found in the headwaters of the Kentucky River System

which contains some of the eastern Kentucky coalfields. The USFWS is promoting the establishment of Candidate Conservation Agreements. By entering into a Candidate Conservation Agreement with assurances, a property owner can obtain certainty that no additional conservation measures will be required and no additional land, water, and resource use restrictions will be imposed, if the species is listed in the future. On March 13,

2013, at an interagency meeting, the USFWS explained the Candidate Conservation Agreements to the other agencies that signed the LICA.

On January 21, 2010, the USFWS received a petition from the Center for Biological Diversity requesting that the northern long-eared bat be listed as threatened or endangered. The northern long-eared bat is a medium-sized bat about 3 to 3.7 inches but with a wingspan of 9 to 10 inches. Its fur color can be medium to dark brown on the back and tawny to pale-brown on the underside. As its name suggests, this bat is distinguished by its long ears, particularly as compared to other bats in its genus, *Myotis*, which are actually bats noted for their small ears (*Myotis* means mouse-eared).



The northern long-eared bat is found in the United States from Maine to North Carolina on the Atlantic Coast, westward to eastern Oklahoma, and north through the Dakotas; even reaching into eastern Montana and Wyoming. Northern long-eared bats spend winter hibernating in caves and abandoned mines, collectively call hibernacula. During summer, they roost alone or in small colonies underneath bark or in cavities or crevices of both live trees and snags (dead trees). Gates or other structures to exclude people from caves and mines restrict bat flight and movement and change airflow and internal cave and mine microclimates, which impact the hibernacula. A few degrees change can make a cave unsuitable for hibernating bats. Also, cave-dwelling bats are vulnerable to human disturbance while hibernating. Bats use up their energy stores when aroused and may not survive the winter or females may not successfully give birth or rear young.

October 2, 2013, USFWS published a proposal to list the northern long-eared bat as endangered throughout its range under the Endangered Species Act, citing sharp declines in the species population due to white-nose syndrome. A notice for a six-month extension for the final listing determination on the northern long-eared bat published in the *Federal Register* on June 30, 2014. The comment period was reopened on the proposal to list the bat as endangered; the 60-day comment period ends on August 29, 2014. A final decision on listing the northern long-eared bat will be made no later than April 2, 2015.

On September 18, 2009, KYDNR issued RAM #142. The RAM provides range-wide Indiana bat protection and enhancement guidelines. In CY 2013, 28 Indiana bat surveys were conducted on Kentucky mining permits that were issued during CY 2013. No Indiana

bats were captured as a result of these surveys. In CY 2013, 22 Indiana bat protection and enhancement plans (PEP) were developed. These 22 PEP's required restoration of 6,043 acres of forest land. This was a decrease from CY 2012. KYDNR is coordinating with the USFWS on protection of the Indiana bat.

6. The Approved State Program

During EY 2013, KYDNR submitted a proposed amendment that increased Kentucky's base bond, in which, OSMRE published a proposed rule. At the end of the EY, Kentucky submitted legislation and implementing regulations on the "Kentucky Reclamation Guaranty Fund", a bond pool, approved by the 2013 Kentucky General Assembly. Finally, KYDNR submitted an informal program amendment in response to an issue letter. Below is a summary of the state program activity.

- On February 20, 2013, OSMRE published a Federal Register announcing receipt and requesting comments of a proposed amendment to the Kentucky regulatory program for surface coal mining and reclamation operations under the Surface Mining Control and Reclamation Act of 1977 (SMCRA or the Act). Kentucky has revised its bonding regulations to satisfy, in part, the concerns included in a letter from OSMRE dated May 1, 2012, regarding bonding inadequacies. On May 4, 2012, Kentucky adopted the revisions as emergency regulations to avoid possible loss of its authority to enforce the part of the Kentucky program that pertains to establishment of reclamation bond amounts. Also on May 4, 2012, identical proposed revisions started the normal review process in Kentucky for changes to administrative regulations. On September 28, 2012, the KYDNR submitted to OSMRE the administrative bonding regulations as proposed amendments to its approved permanent regulatory program. The bonding regulations increase base bond amounts, increase the minimum bond, increase bond amounts for embankment sediment structures, increase the supplemental assurance, require an additional bond for long-term water treatment, and require KYDNR to evaluate the bond amounts every two years.
- On March 22, 2013, Governor Beshear signed House Bill 66, now known as KRS 350.500-521, into law. The emergency provisions of the bill immediately established the Kentucky Reclamation Guaranty Fund (KRGF). KRGF is a reclamation account, requiring mandatory participation, designed to cover the excess costs of reclamation for coal mining sites when the permit specific bond is inadequate. The previous voluntary Bond Pool and Bond Pool Commission were abolished by the legislation. The fund cannot be used for the long term treatment of substandard water discharges or to repair subsidence damage. The legislation allowed a permittee to post a full cost bond in lieu of participating in the

fund. The seven-member KRGF was established to review, recommend, and promulgate regulations necessary to monitor and maintain the fund; establish a structure for processing claims and making payments; establish the mechanisms for the review of the viability of the fund; set a schedule for penalties for late payment or failure to pay fees and assessments; review and assign classification of mine types for fee assessments; and establish a structure for the payment of fees and assessments. Additional responsibilities of the KRGF Commission are as follows: notify Permittees of suspension or reinstatement of fees; employ a CPA to conduct an annual audit of the fund; employ a qualified actuary to perform an actuarial study annually; authorize expenditures from the fund; report to the Governor and Legislature annually on the financial status of the fund; conduct investigations to verify reporting, payment, and other activities of permittees related to the fund; and bring action in Franklin Circuit Court against permittees for recovery of funds spent by the commission for reason of forfeiture. The legislation also established the Office of the Reclamation Guaranty Fund. The Office of the Reclamation Guarantee Fund (OGRF) will provide support to the Commission and perform essential functions such as collecting fees, compiling information for assignment or revising permit classification, and contracting for audit and actuarial services. At the end of EY 2013, KRGF Commission was authorized to conduct business; the OGRF was established and staffed; and on July 3, 2013, KYDNR filed with their legislature both emergency regulations and identical administrative regulations to implement the KRGF.

7. Lands Unsuitable

Though no new Lands Unsuitable for Mining petitions were received by KYDNR, nor any decisions rendered (see Appendix B, Table 12,) one petition (LUM 08-2) is still pending due to numerous legal proceedings. LUM 08-2 and the Cabinet's decision in the form of a Secretary's Order withstood a legal challenge by Miller Brothers Coal, LLC (now Laurel Mountain Resources, LLC) in the Franklin County circuit court but were overturned by the Kentucky Court of Appeals on February 17, 2012. Because the Court of Appeals stated that additional conditions cannot be attached to a "suitability" decision, the Secretary's Order was remanded back to the EEC to reconcile and rectify this discrepancy.

8. Kentucky Mine Mapping Initiative

KYDNR continues to make significant progress on its mine mapping initiative. The Underground Mine Mapping Information System (MMIS) offers immediate online access to geo-referenced underground mine maps to the public, resource extraction industries, and governmental agencies. The online service allows for the identification of historic and current mining activity in both of Kentucky's coalfields and can be used to avoid hazards created by unmapped underground voids. The mine maps can be accessed through the

following website: <http://minemaps.ky.gov>. There is also a new interactive Kentucky Coal Mine Maps map online : <http://eppcgis.ky.gov/flexviewers/minemapping/>.

The entire database that is the backend of the process is in the second year of being rewritten and is almost in production. The system continues to provide essential information in the event of mine disaster rescues, subsidence issues, and blow-outs from abandoned mines. OSMRE (through the Mine Map Repository) did not award any additional funds to KYDNR in EY 2014. The Division of Mine Safety and Licensing also cut funding to the Kentucky Mine Mapping Initiative by 50% due to a legislated budget reduction.

As of June 30, 2014, the database contained 80,460 total scans of which 34,977 were transmittal documents and 43,246 were maps. The number of geo-referenced maps has reached 37,975. The site averaged approximately 9,500 hits a day and 285,000 hits a month for the first two quarters in 2014. KYDNR sent a full refresh copy of all 193,000 files of Kentucky's scans to OSMRE's National Mine Map Repository in Pittsburgh, Pennsylvania. Over 250 very old hardback mine maps have been sent to NMMR and were scanned in Pittsburgh.

9. Geographic Information Systems Including GeoMine

GIS continues to serve the KYDNR mining Divisions with a variety of applications, data, and custom maps. OSMRE's Technical Innovation Professional Services (TIPS) program provides the licenses for the GIS software, and the State monitors license usage. The primary GIS application used by the State of KY is ArcMap, which has been upgraded to version 10.1 for all users. KY Division of Mine Reclamation and Enforcement (DMRE), DAML, and Division of Mine Permits (DMP) are leaders in TIPS GIS software usage. KY has developed many custom tools that enable their users to quickly load mine maps and related information.

In the field, State inspectors and other personnel use terminal service as the preferred method to access GIS data, as it displays maps and data quickly. Applications for the inspector's smart phones and tablets are being tested including PDFmaps, and Geocam for capturing geotagged photos. With it, inspectors are able to locate themselves in real time on the permit mine maps while doing new permit application walks and inspections.

GIS continues to assist the Kentucky's CHIA initiative. The GIS staff has compiled the necessary data in the CHIA templates for the HUC-12 watersheds. Using this data, a software application can be used to query water and other data sets, assemble tables, and create maps that allow for the reviewer to focus their efforts on analysis of the data, and not

simply searching for data to analyze. This contribution has significantly improved productivity within DMP. The GIS staff is also making custom maps, training staff, assisting with the preparation of CHIAs, and resolving all other GIS needs as they arise.

Currently, KYDNR is actively participating in the GeoMine Pilot Project — an OSMRE concept of an internet accessible GIS database of coal mines in the United States. The geographic scope of the pilot project is limited to the SMCRA primacy states of Kentucky, Virginia, West Virginia, and the Federal-administered Tennessee program. All of the states involved in this project will have to compile and sort its data in order to display its coal mining data in the same format, and at one location online. With a task of this magnitude, and with limited personnel and funding, the GeoMine pilot project sought additional grant funding to support the states with assessing GIS needs and provide the most urgent needs to achieve the project's goals. Kentucky used the grant to obtain hardware and software including a large format scanner, fourteen Trimble Junos, 50 GPS tablets, necessary software, and six terabyte memory arrays for a server. The funding also allowed the State to hire interns to assist with the data preparation and organization for this project. As to date three interns are assisting with this project. The interns retrieved paper copies of Mining Reclamation Plan (MRP) maps from the permit files; scanned and geo-referenced the maps; and digitizing the permit boundaries. The bulk of the work was completed in the fall of 2013. The GIS section has also been working on AML data. KYDNR interns worked in the AML office to extract Project Unit (PU) files and scan individual Project Area Descriptions (PAD) maps, and the accompanying data within each PU. They currently have digitized 4,861 Problem Areas, 1,779 Problem Units, 4,189 Problem Polygons, 363 Problem Lines, and 6,030 Problem Points. The Permitted Mine Boundaries feature class currently stands at 20,437 polygons. Proposed Permit Boundaries are now 654 polygons.

10. Technical Innovation and Professional Services

KYDNR is responsible for inspecting all surface and underground coal mining permits within the State to assure compliance with SMCRA. The State utilizes different resources and especially TIPS in an ongoing effort to become more efficient.

On October 1, 1987, OSMRE began distributing computer hardware and software to the States, Indian tribes, and OSMRE offices in coal-producing states, to meet technical and programmatic needs to support decision-making processes that result in objective decisions that are based on scientifically sound data. OSMRE created the Technical Innovation and Professional Services (TIPS) Technical Task Force on February 26, 1988, and delegated

authority to TIPS to meet this nationally important agency objective. On July 22, 1991, OSMRE issued Directive INF-12 to provide guidance for TIPS.

Even today, TIPS continues to work towards the same goal it began with in 1987; providing specialized hardware, scientific software, customized software training, and technical assistance to its user community. This enhances the technical skills of States, Tribes, and OSMRE staff by providing them with equipment, training, and the expertise necessary to use it.

TIPS also provides software and licenses to run them as well. To support the number of software users that KYDNR has would be a tremendous financial strain on the State, so TIPS supplies access to software that otherwise may not be available. There are over 250 State employees who use more than 26 software packages offered by TIPS. GIS and AutoCad software packages are the most common programs used by KYDNR. TIPS ensures that updates and new releases of software are provided to the States to keep the software current and error free through service managers in each of the field and regional offices. During EY 2014, there were five software updates provided to KYDNR. These updates allow users to have fully functioning software and equipment in the office and in the field.

KYDNR has utilized TIPS for equipment, hardware, and software applications that assist the employees with many of its day-to-day functions. One initiative that KYDNR participates in is the “Seeding Technology” initiative. This initiative enables TIPS to make technology available for the State to assess the benefits of the supplied equipment to the program. TIPS continues to make technology, and the expertise needed to operate the new technology, available to KYDNR employees as needs are identified.

11. Cultural and Historic Resources

Among the Kentucky Division of Mine Permits’ accomplishments during the previous fiscal year are the following highlights: The Division accepted an archaeological report by Cultural Resource Analysts, Inc. (CRAI), Lexington, Kentucky, of Phase II testing of site 15Oh327, a multicomponent prehistoric open habitation and historic-period farm/residence site within Armstrong Coal Company’s Ken Coal Mine in Ohio County (permit 892-0118 NW). Testing of site 15Oh327, one of 14 previously unrecorded archaeological sites documented by a survey of the permit area conducted by CRAI in 2012, was required by the Division to better determine the eligibility of the site’s prehistoric component for listing in the National Register of Historic Places (NRHP). During the survey, Brewerton and

Turkey Tail cluster stone tools indicative of Late Archaic to Early Woodland time frames were recovered from this upland site overlooking the Spur Creek and Green River valleys. Testing, conducted in February, 2014, involved the mechanical removal of the plow zone from nine discreet locations covering a total area of 668 square meters (7,190 square feet). Testing failed to reveal additional diagnostic artifacts or undisturbed features or other cultural deposits below the plow zone, and site 15Oh327 was determined to be ineligible for NRHP listing. This lack of research potential beyond the Phase I level is consistent with the results of testing of several smaller Archaic and/or Woodland sites adjacent to or within the Green River valley conducted for coal mining operations during the last several years.

Also, in 2014 the Division accepted a Phase I survey report for a B & W Resources, Inc., permit application area in Leslie and Perry Counties (permit 866-0354 NW). The only cultural resources found by this survey by Apogee Environmental & Archaeological, Inc., Charleston, West Virginia, were a small historic-period cemetery and a fire lookout tower, both immediately adjacent to the permit area. At the recommendation of SHPO, the Jacks Point Lookout Tower (LS-94) was also evaluated for its NRHP eligibility in a separate report by architectural historian Janie-Rice Brother, University of Kentucky, Lexington. In the report, the Jacks Point tower is described as a steel structure approximately 75 feet in height, with an enclosed cab on top and intact support structure and stairs. The tower was manufactured by the Aeromotor Company of Chicago, Illinois, and was erected by the Kentucky Forestry Service in 1967 to replace a wooden tower which formerly stood on the site. The report concluded that the Jacks Point tower is not eligible for NRHP listing due to its age of less than 50 years. Had the tower been constructed in 1964 or earlier, it would be eligible under Criterion A. The national Forest Fire Lookout Association has recorded 165 lookout towers built in Kentucky; however, only six towers are present in the Kentucky Heritage Council Historic Sites Survey Database, and the Jacks Point Lookout Tower is apparently only the second tower in Kentucky for which the NRHP eligibility has been assessed. The tower will be protected from mining by a 100-foot no-mining buffer zone and will be considered within a blasting plan for the permit.

Lastly, in 2013 the Division accepted a management summary from Cultural Resource Analysts, Inc., Evansville, Indiana, describing the results of Phase II testing of site 15Oh296, a farmstead within Armstrong Coal Company's Midway South Mine in Ohio County (permit 892-0117 NW). Site 15Oh296, continuously occupied from the mid-19th century through the early 21st century by members of the William Brown and Gideon Heflin families in succession, was one of 20 previously unrecorded archaeological sites documented by a survey of the permit area by CRAI in 2012. The site included a standing one-and-one-half-story dogtrot log house, the William Brown House (OH-131), and both the house and the surrounding archaeological site were assessed by the survey to be NRHP

eligible. Phase II testing of 15Oh296 conducted by CRAI in 2013 confirmed the site was NRHP eligible, and a management summary was accepted in lieu of a technical report in order that Phase III data recovery investigation could be conducted at the site in October, 2013, in advance of the onset of winter weather. Testing had revealed the presence of an in-filled cellar beneath the house, which could not be thoroughly investigated until the house was removed from above it. As Armstrong Coal elected not to avoid the site in its mining plan, State Level I architectural documentation of the house to mitigate the adverse effect of demolition of the structure was conducted by CRAI in July, 2013, and the resulting report was accepted by the Division in September, 2013. The William Brown House was demolished on October 8, 2013, and the Phase III data recovery at 15Oh296 was performed during the latter half of October.



William Brown House (Oh-131), as seen on October 8, 2013

In addition to the cellar, nine sorghum furnace trenches, intact yard midden, in-filled yard depressions, utility pipe trenches, building foundation piers, and several post holes were investigated during Phases II and III. Moreover, approximately 3,700 historic artifacts were recovered. A combined report of Phase II and Phase III archaeological investigations is being prepared for review, with delivery

anticipated in late 2014 or early 2015. The architectural and archaeological investigations constitute the most extensive examination of a historic farmstead in Ohio County conducted, to date.

VI. National Priority and General Oversight Reviews

One method OSMRE uses to effectively implement its oversight strategies is to identify and evaluate National Priority Reviews of specific topics of concern. During EY 2010, OSMRE selection for National Priority Review was “Determination of Required Bond Amounts”. The final report was completed in EY 2011; however, the issues raised by the report have

required corrective action from EY 2012 through EY 2014. The report can be reviewed on the OSMRE REG-8 Oversight Database website at <http://odocs.Osmre.gov>. From the main page, select the appropriate year and state then select the keyword *bonding*. A summary of these reports is as follows:

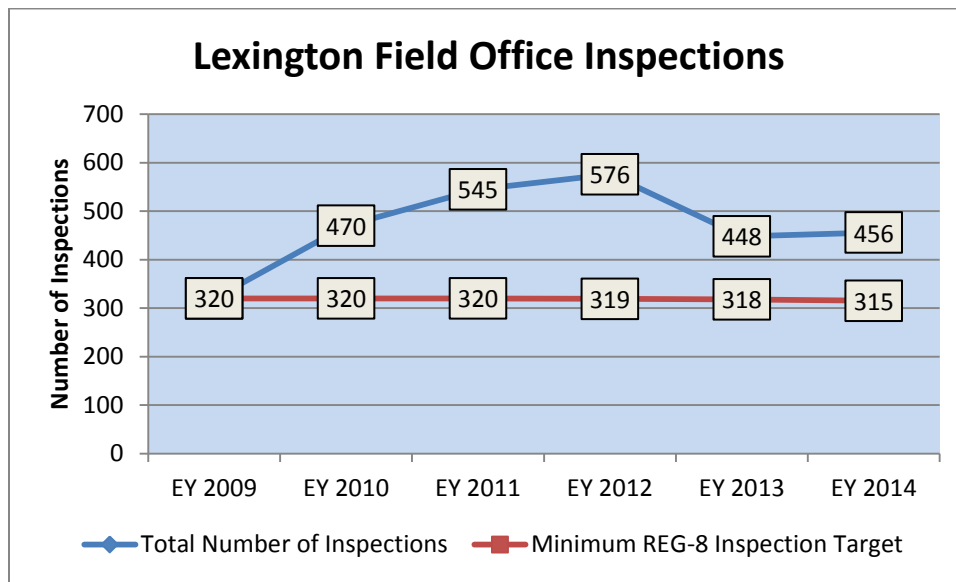
A. Determination of Required Bond Amounts

The evaluation focused on bond reviews using the OSMRE “Handbook for Calculation of Reclamation Bond Amounts” (OSMRE Bonding Handbook) and evaluation of whether forfeiture sites are being reclaimed in accordance with the reclamation plan in the approved permit. In EY 2011 two important actions were taken by OSMRE: 1) The National Priority Review resulted in an agreement for an action plan to resolve the issue; and 2) a 30 CFR 733 letter was sent to the State to require improvements to their bonding system. A detailed discussion of the resolution of the bonding issue is found in Section VII Regulatory Problems and Issues of this report. KYDNR continues to make changes to their program to address the issues identified in the report.

B. General Oversight Topic Reviews

In November 2009, OSMRE announced that, as part of its efforts to improve oversight, it would increase the number of oversight inspections in Evaluation Year (EY) 2010. On January 31, 2011, OSMRE again emphasized the importance of oversight inspections by modifying OSMRE Directive REG-8 to: 1) set a minimum number of inspections for each State program; 2) establish a ratio of complete to partial inspections; 3) select random and focused inspections; and 4) establish independent OSMRE inspections. OSMRE’s initiative to improve oversight emphasized the need to conduct more OSMRE oversight inspections. In EY 2014, LFO conducted 456 oversight-related inspections. The following table shows LFO increased the number of inspections from EY 2009 until EY 2012. LFO inspected fewer sites in EY 2013 and EY 2014 due to a decrease in the number of inspectors. Even with this impact, LFO has been able to exceed the REG-8 inspection target.

During EY 2014, LFO conducted 456 oversight-related inspections: 35 of these were comprehensive independent inspections conducted separately by LFO inspectors, 331 were comprehensive random sample inspections with KYDNR inspectors, 27 were Phase III bond release inspections conducted jointly with KYDNR personnel, 30 field inspections resulting from special studies outlined in the EY 2014 Performance Agreement, and the remaining 33 inspections include: federal enforcement (1), flyrock investigations (1), long term treatment (15), citizen complaint inspections (1) and other oversight or State assisted inspections (15).



LFO issued twelve Ten-Day Notices (TDN) during the EY. These twelve TDNs contained a total of 22 alleged violations — all twelve of the TDNs were the result of citizen complaints. Eight TDNs were satisfactorily resolved with the determination that KYDNR had either taken appropriate action or shown good cause for not taking action on the violations. Two TDNs are pending a decision by the LFO Director to accept or deny the KY DNR response. One TDN is pending a decision by the LFO Director after receipt of legal opinion from the OSMRE KFO Solicitor’s Office based off of the KY DNR response and one TDN was withdrawn due to a District Court Order compelling OSMRE Federal Inspection, which addressed the issues identified in the TDN.

During the EY, no citizens requested an informal review of the LFO’s determination regarding their citizen complaint.

Below are highlights of the oversight studies completed in EY 2014.

1. Budget and Staffing

On February 18, 2014 the FY 2014 A&E grant, which presently funds the regulatory program, was awarded \$10,416,015. For FY 2014 the A&E grant had an increase of \$222,206 from FY 2013 A&E grant estimates. The FY 2014 A&E grant supports 246 positions. Except for \$1,240,963 that Kentucky receives to administer the Federal Lands

Program, the regulatory program is 50 percent federally-funded. The Federal Lands Program is 100 percent Federally-funded.

KYDNR continues to be hampered with their FY 2013 (July 1, 2013 through June 30, 2014) budget by its inability to equally match state appropriations with the allocated federal funds, therefore reducing the amount of total funds available to both the coal permitting and enforcement programs. In addition, the General Assembly in previous sessions increased the department's reliance on restricted receipts, principally the collection of permit application fees by the Division of Mine Permits (DMP). The reduction in Kentucky's coal production has significantly reduced the amount of original/new permit applications being processed by DMP. The resulting impact is a significant reduction in restricted fund receipts available to the division which has required substantial cost constraints to be initiated.

In 2014 KYDNR de-obligated \$412,395 from the FY 2013 A & E grant because KYDNR could not match their 50 percent of the Federal grant. This brought the total de-obligation from FY 2008 A & E grant through FY 2013 A & E grant to \$6,319,308. KYDNR has attempted to lessen the impacts of not being able to match Federal funds on the inspection and enforcement regulatory program. KYDNR has not replaced vehicles, reduced contracts, cut back on travel and eliminated computer hardware expenditures.

The Division of Mine Permits (DMP) Vacancies and Funding: The Division of Mine Permits (DMP) experienced a decline in new permit applications as a result of mine closures, primarily in eastern Kentucky. Since a significant portion of the division's budget is based on fee revenue, the lack of adequate funds resulted in a reduction in the authorized staffing level from 75 personnel to 65 personnel in EY 2014. This affected the DMP permitting process as compared to what was reported in EY 2013. During EY 2013, KYDMP reported 7 permit review delinquencies compared to 14 in EY 2014.

The Division of Mine Reclamation and Enforcement (DMRE) Vacancies and Funding: KYDNR has been forced by continued shortfalls in State revenue to significantly reduce budget and staffing levels. This has been compounded by the increase in State employee retirements in 2008. As of January 2009, there were 88 vacancies within KYDNR. The majority of the vacancies were in the DMRE, where there were 36 vacancies. The majority of the vacancies were the result of the retirement changes in State government. As of January 1, 2010, DMRE reduced the number of vacancies to 29. As of June 30, 2011, DMRE has continued to reduce the vacancies to 14. DMRE began FY 2010 (July 1, 2010) with an authorized a staff level of 185 full-time employees. In late 2011, the Agency

absorbed a two percent reduction in general funds which reduced their staffing authorization to 175. The Governor's budget for KYDNR in FY 2014 started with an authorized staffing level of 161 and ended with an authorized staffing level of 157. See the staffing table below.

Division of Mine Reclamation and Enforcement Staffing

	EY 2010	EY 2011	EY 2012	EY 2013	EY 2014
Total Staffing for DMRE	185	180	167	161	157
Total Number of Inspectors at end of Evaluation Year	72*	72	69	66	63
Inspectable Unit Per Inspector	27	26	27	27	27
*Absorbed nine blasting inspectors from the Division of Explosives and Blasting					

In a Federal Register notice dated July, 31 1998, (63 FR 40825), OSM and KYDNR agreed to field inspector staffing levels of one field inspector per 24 inspectable units (permits). During EY 2009, due to a large number of vacancies, DMRE saw their inspector staffing level rise to one field inspector per 32 inspectable units, which was a significant increase in inspector workload from previous years. As of the middle of EY 2011, DMRE had managed to fill some vacancies and reduce the inspector workload to one field inspector per 26 inspectable units. This ratio has increased to one field inspector per 27 inspectable units through the end of EY 2013. At the end of EY 2014, KYDNR reported a ratio of one field inspector per 27 inspectable units. LFO is closely monitoring the budget and staffing issues and will develop recommendations for actions, as appropriate.

2. Comprehensive and Random Sample Inspections

The oversight format of LFO provides for a general assessment through random oversight inspections. The purpose of these inspections is to evaluate the degree of industry compliance with the approved State program. The vast majority of oversight inspections are conducted jointly, in which the KYDNR inspector accompanies OSMRE staff on the inspection. These are known as comprehensive random sample inspections. However, OSMRE also conducted independent, unannounced oversight inspections, which validate and enhance the credibility of both the KY regulatory program and OSMRE's oversight approach. These inspections are known as comprehensive independent random sample inspections.

During EY 2014, LFO conducted 331 comprehensive random inspections and 35 comprehensive independent random sample inspections. All 366 random samples were selected from the list of active and Phase I bond released permits on both surface and underground coal mining operations.

One- hundred and eighteen (32 percent) of the permits inspected were in violation, with 289 total violations observed. Sixty (16 percent) permits had new violations, which KYDNR cited. Forty-seven (13 percent) of the permits had violations that KYDNR had previously cited. Eleven (3 percent) of the permits had violations that were abated during the oversight inspection. Fifty-seven (16 percent) of the permits had violations that caused off-site impacts. OSMRE did not issue any TDNs on the 366 comprehensive random inspections for EY 2014.

LFO further analyzed these violations by type of inspection, i.e., comprehensive random inspections and comprehensive independent random inspections, to determine if there was a difference in the nature or frequency of violation citation between the two types of comprehensive inspections. The following table depicts, the difference between violations observed or cited during random or independent inspections.

The most often cited performance standards during EY 2014 were Siltation Structures, terms and Conditions of the Permit, and Contemporaneous Reclamation for the 289 violations observed during comprehensive oversight inspections.

Violation Characterization (percent of Total)	Comprehensive Random Inspections	Comprehensive Independent Inspections	Combined Total
Total Violations Observed	237	52	289
New Violations	83 (35%)	20 (38%)	103 (36%)
Previously Cited Violations	143 (60%)	32 (62%)	175 (60%)
Abated During Inspection	11 (5%)	0 (0%)	11 (4%)
TDNs Violations issued	0 (0%)	0 (0%)	0 (0%)
Violations with Off-Site Impacts	57 (24%)	16 (31%)	73 (25%)

Table listing the type and results of the oversight inspections.

Data collected for seriousness and type of off-site impacts was compared between comprehensive random and independent inspections. The following tables detail these findings.

Degree of Off-site Impact (Percent of Total)	Comprehensive Random Inspections	Comprehensive Independent Inspection	Combined Total
Minor	44(44%)	15 (54%)	59 (46%)
Moderate	40 (40%)	12 (43%)	52 (41%)
Major	16 (16%)	1 (3%)	17 (13%)

Table listing the seriousness and type of off-site impacts for all inspections.

Type Impact (Percent Of Total)	Comprehensive Random Inspections	Comprehensive Independent Inspection	Combined Total
Land	42 (42%)	13 (46%)	55 (43%)
Water	44 (44%)	15 (54%)	59 (47%)
Structures	6 (6%)	0 (0%)	6 (5%)
People	8 (8%)	0 (0%)	8 (6%)

Table listing the breakdown on the effects on land, water, people, and structures.

In summary, LFO found little difference between the number or nature of violations observed during comprehensive random inspections and comprehensive independent inspections. Independent comprehensive inspections served the purpose of validating the integrity of the joint comprehensive random sample inspections.

3. Partial Oversight Inspections

OSMRE conducts partial inspections throughout the EY to further evaluate certain areas of the state regulatory program. The majority of these inspections were conducted jointly with KYDNR inspectors. OSMRE conducted 85 partial inspections in EY 14, and found 9 violations on 4 permits.

Partial Inspection Type	Number of Violations Cited
OMDAI	1
OMDDS	2
OPO	6

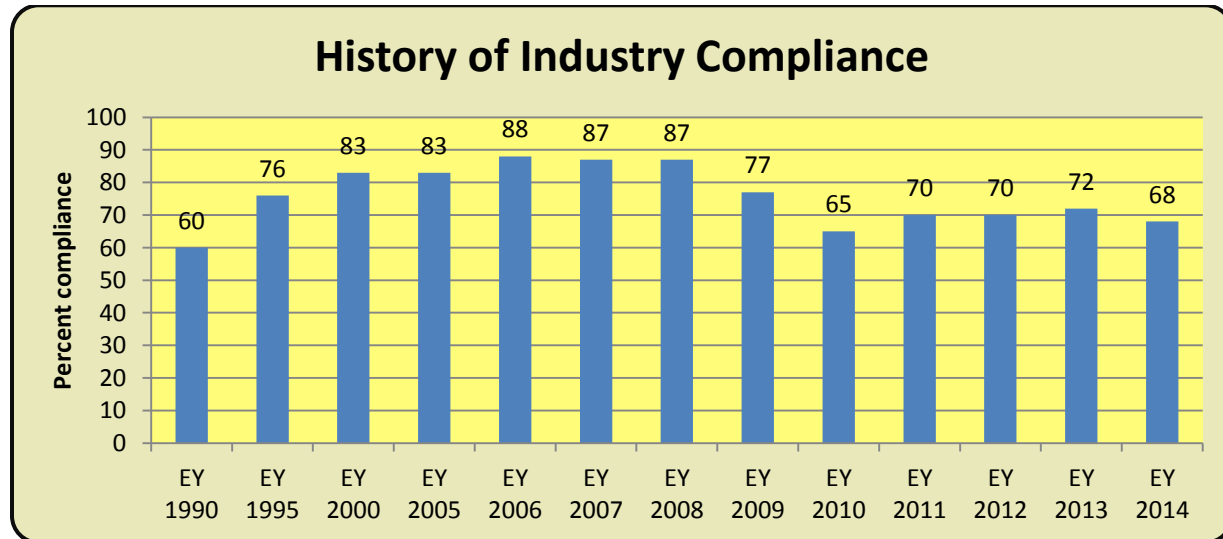
Table Listing the partial inspection type and number of violations cited

The partial inspection types where violations occurred were Mine Drainage Active inventory (OMDAI), Mine Drainage Deleted Sites (OMDDS), and Partial Other (OPO).

4. Industry Compliance

As part of the yearly evaluation, LFO tracks industry compliance.

Industry compliance is a measurement of the number of OSMRE and DNR comprehensive random inspections with no observed violation and expressed as a percentage of the total number of OSMRE and DNR comprehensive random inspections conducted in the EY." For EY 2014, OSMRE found that 248 of the 366 (68 percent) permits in KY were in full compliance with all performance standard categories. The chart below identifies the trends for industry compliance over the past twenty-plus years. Industry compliance has improved from 65 percent in EY 2010 to 87 percent in EY 2008. Since EY 2008 Industry compliance has drop to a low in EY 2010 of 65 percent with only a slight increase this EY to 68 percent.



5. Inspection Frequency

Inspection frequency is based on 405 KAR 12:010, Section 3(5). This provision requires KYDNR to conduct one complete and two partial inspections per calendar quarter for all active mine sites (permits that have not achieved Phase I or Phase II bond release). Inactive mine sites (permits with Phase I or II bond release or in temporary cessation) require one

complete inspection per quarter. Abandoned sites (permits in bond forfeiture) also require one complete inspection per quarter. KYDNR reported the following inspection numbers for this EY:

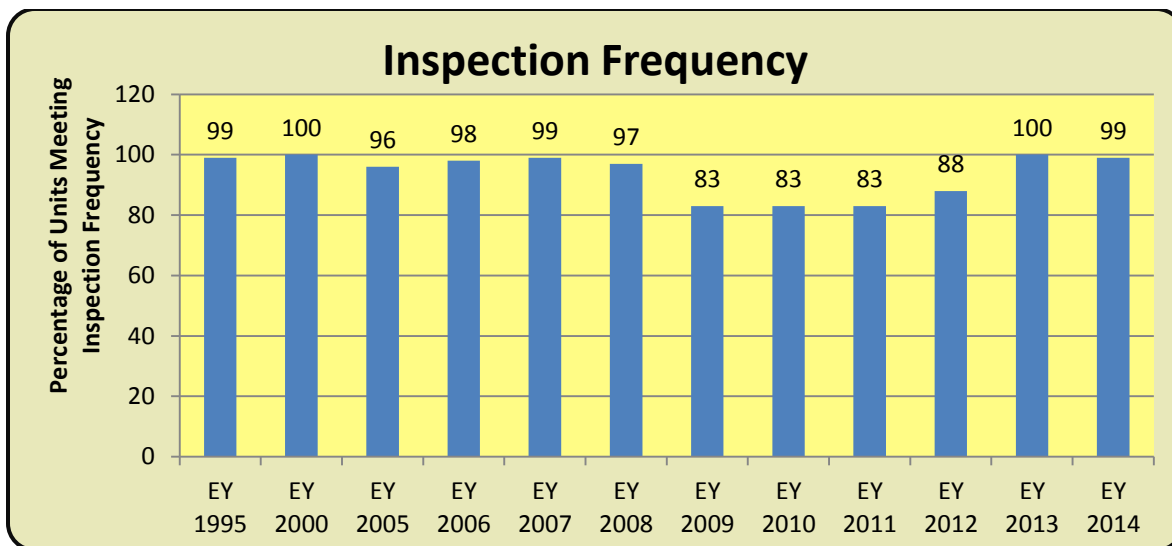
Coal Mines and Facilities	Number of Complete Inspections	Number of Partial Inspections
Active	7,227	13,135
Inactive	214	83
Abandoned	34	29
Total	7,475	13,247

Chart of breakdown of inspection statistics for active, inactive and abandoned sites

Number of Permits Requiring Inspections	1,748
Number of inspections conducted	20,722
Number of Permits Meeting Frequency	1,665
Percentage of permits meeting frequency	99%

Table showing the calculation of the inspection frequency

For the 12-month period in EY 2014, KYDNR met inspection frequency on 99 percent of inspectable units. As can be seen in the following chart, this is an improvement from the downward trend seen between EY 2009 and EY 2011. The drop from 97 percent in EY 2008 to 83 percent in EY 2009 was a predictable result of the significant budget shortfall that continued to impact KYDNRs ability to backfill and maintain the vacancies created by the high number of retiring inspectors.



Inspection frequency is also tracked quarterly by KYDNR. The quarterly results for the first quarter (July 1, 2013 – September 30, 2013) KYDNR met inspection frequency on 99.9 percent of the inspectable units; the second quarter (October 1, 2012 – December 31, 2012) KYDNR met inspection frequency on 100 percent of the inspectable units; the third quarter (January 1, 2014 – March 31, 2014) KYDNR met inspection frequency on 99.4 percent of the inspectable units; and the fourth quarter (April 1, 2014 – June 30, 2014) KYDNR met inspection frequency on 99.9 percent of the inspectable units. For the entire evaluation year, Kentucky inspection frequency has been restored to historic levels.

There are three primary reasons for the improvement:

- 1) The importance of meeting frequency requirements was emphasized during field staff meetings in 2013 and 2014. Regional managers were directed to make every effort to ensure their respective inspection staffs were aware of frequency requirements, and that workloads were being managed effectively.
- 2) During EY 2013 and again in EY 2014, the coal industry has experienced a dramatic decline in production due to market conditions and other issues. This decline has resulted in fewer active mine sites, therefore decreasing demand on inspectors' time required for citing and processing enforcement actions, citizen's requests for inspections, and other activities which often affect the inspector's ability to meet frequency.
- 3) Throughout EY 2013 and EY 2014, additional inspection workloads were assumed by other enforcement staff, such as section supervisors and bond release specialists, to compensate for a decrease in funded full time inspection staff. It should be noted,

however, this is not a permanent solution to meeting inspection frequency requirements.

6. Bond Forfeiture Report

Adequacy of bond amounts to reclaim bond forfeited mine sites have been studied as part of the evaluation year oversight since 2007. The data used in the evaluation are for the preceding calendar year. For example, this evaluation year is 2014 but the data used in the evaluation is for calendar year 2013. The prior studies identified concerns regarding the adequacy of bond amounts and supplemental assurance, the lack of assurance that acid mine drainage (AMD) discharges would be treated, and the timeliness of enforcement/legal actions.

This year's follow-up study evaluated the twenty five permanent program bond forfeitures occurring during CY 2014. The study found:

Forfeiture Year	Evaluation Year	# Forfeited Permits	# Inadequate Permits	% Adequate
2007	2008	5	4	20
2008	2009	5	2	60
2009	2010	12	10	17
2010	2011	22	17	23
2011	2011	22	18	18
2011	2012	15	12	20
2012	2013	15	13	13
2013	2014	25	*17	32

*Four of the eight sufficiently bonded permits are bonded by the Kentucky bond pool.

- This study found that seventeen of the twenty five permits did not have sufficient bond to reclaim the permit to permanent program standards.
- Four of the eight sufficiently bonded permits were bonded under the Kentucky bond pool.
- On an increment basis, 70 of 98 forfeited increments did not have sufficient bond to reclaim the increment to permanent program standards.
- Increments were under bonded on average by \$36,525.91.
- The increased number of forfeitures in the last four CYs has impacted the number of sites awaiting reclamation. That number has increased from a low in EY 2009 of 60 sites to 85 sites in EY 2013.

DAML has made excellent progress in reducing the overall number of permanent program bond forfeitures awaiting reclamation since 2000, with a slight increase in 2011, 2012, and 2013. The increased number of forfeitures in the previous evaluation years has impacted the number of sites awaiting reclamation. That number has increased from a low in EY 2009 of 60 sites to 85 sites in EY 2013.

OSMRE will continue the bond forfeiture special study in EY 2015 for permanent program bond forfeitures occurring in EY 2014. OSMRE has and will continue to work closely with the KYDNR to resolve the bonding issue to make sure that every surface mining bond is sufficient to ensure full reclamation; avoiding the creation of additional forfeitures where possible; avoiding destabilizing the surface coal mining bond market; and maintaining DNR's viability as a primacy program.

7. Flyrock Events and Results of Blasting Study

Flyrock Events: There was one flyrock event and one blasting violation this EY which was four less flyrock events from EY 2013. The lone flyrock event occurred August 7, 2013, on a permit operated by Revelation Energy, LLC. There was one blasting violation other than a flyrock that occurred on March 6, 2014, and was also on a permit operated by Revelation Energy. OSMRE and KYDNR found only one of these to be a flyrock event. The following is a brief summary of each incident.

- 1) On August 7, 2013, Revelation Energy, LLC, and the blasting contractor Austin Powder Company self-reported they had cast rock material beyond their permitted boundary, permit number 813-0388, resulting from a blast. The material was cast approximately

(500) feet past the permit boundary and was approximately (800) feet from the nearest protected structure. Some of the contributing factors for the flyrock were as follows:

- a. This was a pre-split shot, but the top (20) feet were loaded as a breakdown shot with the top (12) feet consisting of drill cuttings for stemming and the next eight feet were filled with Ammonium Nitrate Fuel Oil (ANFO). Typically a pre-split shot will consist of a small percentage of drill cuttings in the top followed by an air deck occupying the majority of the drill hole and will have a small powder column in the bottom of the hole. Although a true Powder Factor cannot be calculated on a pre-split shot because there is not a burden dimension associated with the shot pattern, loading the holes with less ANFO may have prevented the incident.
- b. While the shot loading procedure was not the direct cause of the flyrock incident, the absence of a catch bench was the main contributing factor. Due to the blast being located on a steep slope, any loose rock or material generated from the shot was more than likely to roll down the outslope and beyond the permit boundary.

While the event did not put the public in any danger, trees located outside the permit boundary were damaged from rocks as they traveled down the outslope.

2) On March 6, 2014, Revelation Energy, LLC, and the blasting contractor Austin Powder Company, self-reported an incident later determined not to be a flyrock event but still resulted in a blasting violation on permit number 867-0511. Rock and blasted material travelled from the blast to an adjacent sediment structure displacing water and sediment causing this material, as well as windrow material, to travel several hundred feet beyond the permit. Some of the contributing factors are as follows:

- a. The overburden moved simultaneously, similarly to a cast blast, toward the outslope filling the sediment structure indicating either the shot was overloaded with powder and/or the holes were drilled angling slightly towards the toe of the overburden.
- b. While the sediment structure acted similar to a catch bench and prevented the blasted material from travelling down the outslope, however, since the structure was full, the material replaced the sediment in the structure causing the sediment and water to travel down the outslope. This could have been mitigated by dewatering and removing the sediment prior to the blast.

Although, no persons were directly endangered from the blast, sediment and non-treated water were deposited into the environment beyond the permit boundary and also affected one half mile of stream channel near the permit.

Blasting Study: During Evaluation Year 2014, a blasting team consisting of personnel from the OSMRE and KYDNR conducted a joint special study. This study was conducted in order to confirm permittees were correctly implementing the blasting elements from Kentucky Administrative Regulations, Title 405 (405 KAR). Five known active producing surface mining permits were selected for evaluation, one from each of the KY KYDNR regional offices. This study evaluated each permittee to determine if they were adhering to each item in the 405 KAR, in addition to accepted and standard blasting principles and procedures. The following is a non-exhaustive list of items inspected and reviewed:

- 1) If the blaster was familiar with the approved blasting plan and was being implemented in a way as to eliminate the occurrence of flyrock events
- 2) Standard blast design principles and characteristics such as number of holes, burden, spacing, decks, delay pattern, diameter and depth of holes, types of explosives used, total weight of explosives used and weight per hole, maximum weight of explosives detonated within any eight millisecond period, scaled distance, holes detonated within any eight millisecond period, type of initiation system, type of circuit, type and length of stemming, seismographic and airblast records, if used, which include for each record; type of instrument, location of instrument and the date of, time of, and distance from the blast, actual seismographic record, and name of the person and firm taking the reading
- 3) Evidence of previous flyrock events, measures being taken to prevent future flyrocks, (i.e. Catch Bench)
- 4) Blasting records for the shot being observed and to include the previous ten blasts. Each blast record was evaluated using the Blast Log Evaluation Program
- 5) Identifying signs and markers were correctly posted and maintained
- 6) Access control to and from the blasting site and surrounding areas as well as the warning and all clear signals
- 7) Permittee interaction with the public to include, proper notification and contents of the blasting schedule, opportunity for pre-blast surveys, and any unscheduled blasts.

After reviewing blasting operations, five permits were evaluated compared to the approved blasting plan and were determined to be in compliance with 405 KAR. Three of five permits contained an Anticipated Blast Design (SMP-61) and were more susceptible to flyrock events due to blasting within (1000) feet of a protected structure outside of the permit

area or within (500) feet of an active (SMP-60) or abandoned underground mine. Future special studies will continue to focus on selecting permits that have a higher likelihood for a flyrock event in order to ensure the strictest compliance to 405 KAR.

8. Long-Term Treatment (LTT)

The Long Term Treatment Inventory (LTT) is a comprehensive list of all identified Acid Mine Drainage (AMD) sites within the Commonwealth of Kentucky. This inventory is maintained by the KYDNR. It is monitored and evaluated annually by the LFO. The LTT is made available to DMP, DMRE, and DAML.

The number of sites on the LTT inventory is governed by the KYDNR's policy. This policy contains guidelines for the KY DMRE and the KY DMP in the identification, qualification, and inventory of LTT sites. On May 6, 2013, the KYDNR issued the current version of its LTT policy.

The LTT is divided into an active and a historical list. The inventory is organized by permit number, with some permits having multiple AMD sites. The active list contains only those sites that currently require treatment to meet effluent limits. The historic list is a record of sites which have been removed from the active list. An AMD site is moved from the active to historic list when it no longer requires treatment to meet effluent limits.



Current criteria for removal from the active list are outlined in the KYDNR's LTT policy. The KYDNR notifies the LFO of all AMD sites being moved from the active to historic list. Upon notification, LFO reviews the file and conducts a field inspection. The purpose of the review and inspection is to verify that the AMD site meets the KYDNR's current LTT policy criteria for removal from the active list.

As of June 30, 2014, there were 150 permits on Kentucky's LTT active inventory and 265 permits on the historic inventory. During this EY, nine sites were added to the list and eight were removed. All sites removed from the active inventory were inspected by the LFO.

The KY DAML adopts all forfeited permits from the KY DMRE. Due to the LTT Inventory being a KY DMRE document all forfeited permits are removed from the active to the historical list. When a permit is removed due to forfeiture the KY DMRE notifies the KY DAML, for their tracking purposes. LFO only inspects those sites moved from the active to historic list due to 12 months of compliant water quality.

9. Fill Inventory

The Lexington Field Office (LFO) and the Kentucky Department for Natural Resources (KYDNR) have collected information on the size and location of excess spoil disposal fills for all new permits, amendments, and major revisions issued since Calendar Year (CY) 1999. This includes both newly permitted fills and existing permitted fills. OSMRE and KYDNR use the data to track and evaluate the total number and size of fills permitted from year to year. The graphs below show the total number of fills permitted every year since CY 1999.

Historical Trend Analysis of Fill Data:

Figure 1 shows a steady decline in the number of fills permitted over the years from a high in CY 1999 of 348 to a low in CY 2012 of 92, a slight increase was observed in CY 2013 to 108. Using this data it is unclear as to the cause of the overall decline in permitted fills, however it more than likely is attributed to the overall downturn in the coal market.

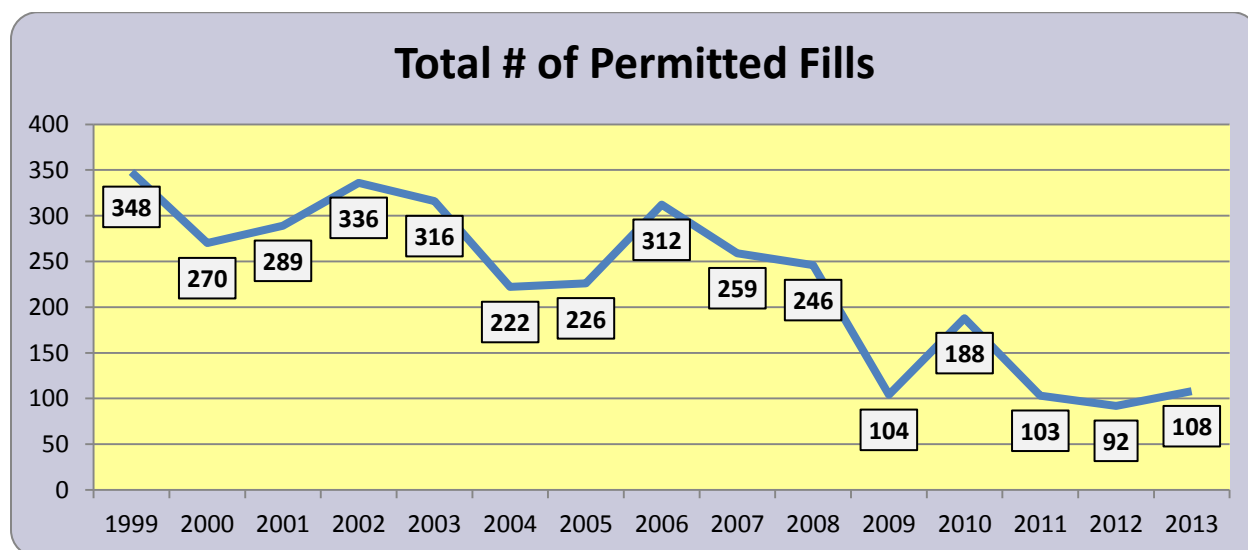


Chart showing the number of fills from CY 1999 through CY 2013

KYDNR issued 182 permitting actions (56 new permits, 82 amendments, and 44 major

revisions) in CY 2013 involving surface, underground, or other mining operations. LFO and KYDNR found 47 permitting actions that contained information on 108 proposed fills. The other 135 permitting actions did not involve fills. Information gathered on each of the fills is contained within the Kentucky Fill Inventory report which can be found at: <http://www.arcc.Osmre.gov/FOs/LFO/KY/kyoversight.shtm>.

VII. Regulatory Program Problems and Issues

A. Action Plans

One Action Plan continued in EY 2014 that started in EY 2011. This was the Determination of Required Bond Amounts Action Plan. A discussion of the Action Plan and associated report is found in section *VI. A. National Priority and General Oversight Topic Reviews* of this Annual Report. The full report and Action Plan can be reviewed by visiting the OSMRE website link at <http://odocs.Osmre.gov>. Website visitors should choose the specific state, year, and “Action Plans” in the category field a description and the status of this action plan follows:

1. Determination of Required Bond Amounts Action Plan

OSMRE oversight and programmatic reviews have identified that mine reclamation performance bonds in Kentucky are not always sufficient to complete the reclamation required in the approved regulatory program. OSMRE has studied bond forfeitures in Kentucky on an annual basis for several years. The last five studies found that 78 percent (63 of 81) of forfeited permits did not have sufficient bond to complete reclamation to permit standards. The study this evaluation year found that 68 (17 of 25) percent of forfeited permits did not have sufficient bonds

On February 3, 2011, OSMRE and KYDNR signed an “*Action Plan for Improving the Adequacy of Kentucky Performance Bond Amounts*” to timely and effectively resolve these issues. On January 17, 2012, OSMRE responded by letter to KYDNR and included the final Bond Team Report. OSMRE found that, while the revised protocols were an improvement over the current method of bond calculations, they did not result in the calculation of performance bonds sufficient to complete reclamation to permanent program and permit standards should forfeiture occur.

On February 9, 2012, KY responded to OSMRE by advising that the State was pursuing a course of action to remedy the issue by promulgating a regulatory package that includes a bond pool. This legislation was prepared for submittal to the KY General Assembly for the

2013 session. On March 23, 2012, in a meeting with the OSMRE Director, OSMRE advised Kentucky that their proposal lacks specificity and immediate action steps to address the situation, and a commitment to a specific timeline to ensure that the inadequacies will be fully addressed in a timely and realistic manner.

On May 1, 2012, the OSMRE Director sent a letter to Kentucky initiating the Part 733 process. The process will allow Kentucky the opportunity to correct its bonding program deficiencies. On May 7, 2012, OSMRE received emergency regulations signed by Governor Beshear. Kentucky promulgated these emergency regulations effective immediately in order to take a proactive step to avoid possible loss of part of the Kentucky Program and loss of funding for the AML program. The emergency regulations became permanent regulations and, on September 28, 2012, were submitted to OSMRE as a program amendment. Kentucky's emergency regulations were effective immediately and applied to all new permits, major revisions, mid-terms and renewals. During May 2012, KYDNR also began recalculating the bond during the mid-term review process. At the end of EY 2013, KYDNR had initiated 729 mid-term reviews to evaluate bond and as a result, permittees had posted additional bond on 211 permits.

On June 4, 2012, the Secretary, Kentucky EEC, responded on behalf of the KYDNR to OSMRE on the 733 letter. In the letter, the Secretary identified Kentucky's plan (phase one) for corrective action (increase base bond amounts) and requested an informal conference with OSMRE to discuss the plans for resolution and proposed timetable for implementation. The Secretary also stated that in the second phase the State would hire a contractor to develop a bond pool. A conference was held on August 8, 2012. KYDNR agreed to a corrective action plan, implemented new regulations increasing bond rates, and introduced legislation in the 2013 Kentucky General Assembly to create a mandatory bond pool.

By December of 2012, KYDNR received from its contractor, Pinnacle Actuarial Resources, Inc., final reports and an actuarial study supporting the rationale and development of a new Bond Pool. The KYDNR envisioned a fee based bond pool that would establish a reclamation fund to supplement individual bonds for each mining permit where the individual bonds are insufficient to achieve adequate reclamation.

On February 19, 2013, legislation establishing a "Kentucky Reclamation Guaranty Fund" (KRGF) was introduced to the Kentucky General Assembly. Throughout February and March, the legislation was amended and modified obtaining passage on March 12, 2013,

and signed into law on March 22, 2013 by Governor Steve Beshear. At the end of EY 2013, KRGF Commission was authorized to conduct business; the Office of the Reclamation Guaranty Fund was established and staffed; and on July 3, 2013, KYDNR filed with their legislature both emergency regulations and identical administrative regulations to implement the KRGF.

On December 3, 2013, KYDNR submitted the administrative regulations that had become effective after the legislative session. They included updates to the definitions included in the regulations and updates to the general bonding provisions. The new regulations that established the Kentucky Reclamation Guaranty Fund, Full-cost Bonding, Production Fees and the repeal of the regulations for the previous bond pool were also included. These regulations are being included in the resubmittal of a program amendment to address the concerns noted in the *“Action Plan for Improving the Adequacy of Kentucky Performance Bond Amounts”* that both OSMRE and KYDNR signed on February 3, 2011.

VIII. OSMRE Assistance

A. Grants

During the EY, OSMRE awarded over \$55.4 million to KYDNR to fund the Title IV AML and Title V A&E Regulatory Programs. The grant cycle for AML begins on July 1st, and the A&E grant cycle begins on September 1st, of each CY. This means the State draws from two separate Federal grant year monies during the EY. For example, the State does not begin drawing its Federal FY 2013 A&E grant money allocation until September 1, 2013. Prior to that time, they operate on FY 2012 money, from July 1 through August 31, 2013. The AML program does draw down the AMD set-aside money soon after the Federal allocation, but does not begin drawing the remainder of the grant allocation until July 1st of the following year. The following narrative details money awarded to KYDNR during the EY.

AML Grant: The AML program requested \$42,428,400 to fund 100 percent of the total program costs. This includes \$3,000,000 for the AMD Set-Aside Fund. The AML grant money funds 98 DAML positions. In FY2014, OSMRE awarded \$34,925,740 to the Kentucky DAML for their program. The FY2014 grant included \$5,550,000 in AMD Set-Aside funding.

A&E Grant: The FY 2013 A&E grant, which funds the regulatory program, was initially awarded for \$10,193,809 and reflected a reduction from the state requested amount because KYDNR did not have an approved indirect cost plan. An additional \$1,604,428 was added

on July 14, 2014, when the indirect cost plan received approval. The total amount then became \$11,798,237. The state de-obligated \$412,395 of this grant amount prior to close of the grant year. The grant of \$11,385,482 funds 328 positions. The regulatory program is 50 percent Federally-funded, except for the \$1,516,760 that Kentucky received to administer the Federal Lands Program. The Federal Lands Program is 100 percent Federally-funded. The grant awarded by OSMRE for FY 2014 was \$10,416,015 and doesn't include indirect costs. The indirect cost plan has been approved so an additional modification to the awards will be made in the future.

OSMRE is committed to providing adequate funding and technical assistance to the Kentucky program. KYDNR personnel are encouraged to take advantage of available OSMRE technical training courses. Regional and LFO technical staff are available to provide support to the Kentucky program when needed.

B. Training Initiative

Last EY, KYDNR's training emphasis focused on continued training by both DMP and DMRE. Although not at the same pace, the training continued this year. The following lists the training that DNR conducted this EY.

DMP- DMP provided the permit review staff with an understanding of the different components of the Kentucky Reclamation Guaranty Fund (KRGF), and what bond computations need to be considered during the permit review process. Staff was updated on the components that must be evaluated during the mid-term review process. For those permittees who elect to opt out of the KRGF during the permit application process are required to post "full cost bonds". This training was provided to the permit review staff so they would be familiar with every component, which included bond calculations and shape files that must be assessed when calculating full cost reclamation bonds.

DMRE-DMRE conducted training for inspection personnel on the following topics during a two day training session for each of the regional offices. The topics presented included: KRGF,DMRE law school training on documentation and preparation for hearings, Conducting pre-mining conferences -Inspection staff must perform a thorough review of the approved permit with the company prior to disturbance of the site so they understand the regulations and the agency's expectations, Underground mining – overview of the different underground mining technologies and what should be inspected and assessed during inspection of these sites, Preventive Enforcement – training inspection personnel to anticipate and observe situations that could result in a violation. Inspection personnel are required to document these situations and request the company to rectify those conditions

before turning into a violation (FP code on our inspection reports), Subsidence training, SEDCAD/ Modeling programs employed during review, Backfilling & Grading techniques and “time & distance” requirements attendant to contemporaneous reclamation, Blasting requirements and conditions, Use of “Water Quality” (WQ), “Effluent Limitations “ (EL) and “General Hydrologic Requirements” (HR) when citing violations “Contemporaneous Reclamation” – overview of all the components that must considered when assessing compliance.

C. Federal Lands

In 1998, the KYDNR entered into an agreement to manage aspects of coal development in Kentucky that were not conveyed under the initial coal management regulations. One of those areas was the regulation and control of surface coal mining operations on Federal lands. While the KYDNR administers the Federal Lands coal program in Kentucky, OSMRE provides support to KYDNR in managing the coal program by assisting federal land managers that are involved with developing coal support to help them meet procedural requirements. OSMRE is also responsible for making determinations of Valid Existing Rights (VER) for KYDNR’s use in issuing of permits with VER issues. There are several Federal agencies that are involved in coal related activities in Kentucky; the U. S. Army Corps of Engineers (COE), the Tennessee Valley Authority (TVA) and the United States Forest Service (USFS) within the Daniel Boone National Forest.

The COE has several projects in Kentucky that were established to provide for inland navigation, flood-damage reduction, environmental protection and restoration, recreation, water supply, and other public benefits. The lakes in the Kentucky coalfields that are managed by the COE include: Carr Fork, Dewey Lake, Fishtrap Lake, Grayson Lake, Martin’s Fork, Paintsville Lake, and Yatesville Lake. Fishtrap Lake and Dewey Lake have the majority of the coal mining activity for the COE.

The DBNF is located along the Cumberland Plateau in the Appalachian foothills of Eastern Kentucky. The forest encompasses over 707,000 acres of mostly rugged terrain. The forest has a multiple use land management philosophy; which allows for activities in recreation and land acquisition; along with timber management and mineral development. The mineral activities that are most prominent are oil, natural gas and coal mining activities.

The TVA is a corporation owned by the U.S. government that provides electricity to many within the region; but they also provides flood control, navigation and land management for the Tennessee River system and assists utilities and state and local governments with economic development. For many years TVA owned hundreds of acres of coal mineral estates in eastern Kentucky; however most of these holdings were transferred to the Daniel Boone National Forest around 2000 or 2001. Some of the remaining TVA coal leases

and/or coal mineral estates still have coal mining potential, based on the interest from the industry.

In EY 2014, two mining permit applications involving federal lands were submitted to KYDNR. There was one application submitted on properties within DBNF jurisdiction and another within TVA jurisdiction. The permits approved are as follows: one was a new application and one was an amendment.

Along with supporting federal land management agencies through the coal permitting process, OSMRE plays a role by making important determinations regarding coal operations on federal lands. When permit applications are submitted to the state of Kentucky involving federal lands, there can be two decisions that OSMRE will make:

Valid Existing Rights (VER) Determinations and Compatibility Determinations.

VER determinations pertain to the rights that would allow an operator or property owner to conduct surface coal mining operation on lands where provisions of the law would prohibit those operations. Prohibitions on surface coal mining activities on federal lands are found within the section 522(e) of SMCRA. To make this determination, OSMRE reviews all pertinent information that is supplied by the operator/property owner; and uses the “Good faith/all permits standard” to review the submitted information. There have been no VER determinations in this Evaluation Year.

Compatibility Determinations are processed under section 522(e)(2) of SMCRA; and include a recommendation from the land management agency on whether the goals and objectives of the federal interest and the permit application activities are compatible according to the SMCRA definition of compatibility. During the evaluation year, no compatibility determinations have been completed.

IX. Abandoned Mine Lands Reclamation

The Kentucky DAML program continues to be successful in achieving lasting and effective reclamation of mined lands that eliminates hazards to the public and restores land to beneficial uses. The AML grant funds projects that have been deemed eligible for funding, these projects range from water lines to “high priority” sites that are threatening the safety of local residents.

During the EY, DAML submitted 77 new projects for authorization to proceed during the EY, with a construction budget of totaling \$31.5 million. Eleven of the new projects will upgrade existing and/or construct new water supply facilities to provide safe domestic water supplies for approximately 1,143 new residential customers, installation of approximately 524,238 linear feet of new water line, along with associated features such as pump stations, water tanks, and pressure relief valves at an estimated cost of \$19,707,862.

In addition, three of these projects were AML enhancement rule projects, where refuse piles and other waste material are removed from sites that are not likely to be otherwise funded, other projects were submitted as high priority projects, for which Kentucky requested expedited “authorization to proceed” or ATPs.



Construction activities Kimber Castle AML reclamation site

DAML manages its program in a cost effective and efficient manner. All projects comply with applicable laws and regulations, are well designed and constructed using the best technology available, are completed with minimal disturbance to the environment, and are well monitored to ensure projects meet contract specifications, project objectives, and program goals.

Since the reauthorization of the Federal AML Fund collection provisions, Kentucky has been making adjustments to the AML program. In EY 2010, OSMRE eliminated its Federal Reclamation Program Division (FRPD) which responded to AML Emergency projects. DAML now responds to all projects and handles projects previously done by FRPD as high priority projects. In EY 2011, the DAML established an office in Hazard, Kentucky, to place personnel in the field that are better able to respond to the public. The office has been fully staffed since 2012 and is now responding to complaints and fully supporting the AML program.

Prior to FY 2008, DAML decided the AML grant allocation was insufficient to take part in SMCRA’s Acid Mine Drainage (AMD) Set Aside provisions and accomplish other AML reclamation work needed during each year. In recent years, DAML began participating in the AMD program by requesting an estimated amount each year for deposit in its AMD Fund to address pending projects. In 2014, the AMD fund was increased and DAML

transferred \$3 million. This funding allows DAML to proceed with complex AMD projects in spite of previous lean funding years for the AMD program.

A. AML Inventory System AMLIS

KYDNR fully supports the direct access to the AMLIS, which allows DAML to electronically input AML problem data. DAML has been directly updating the AMLIS since the fall of 1995. DAML submitted a letter dated July 6, 2004, certifying that they have a system that ensures the accuracy of data they input into the AMLIS. DAML continues to use this system along with current OSMRE AMLIS guidelines. The e-AMLIS allows Kentucky and local OSMRE staff to update the database and review proposed entries almost as they are submitted into the inventory.

In June of 2014, the OSMRE Headquarters had a two day training session on the e-AMLIS system with OSMRE and State employees within the Appalachian Region. The purpose of the meeting was to answer questions regarding the implementation of the new AML-1 Directives and to ensure that proper reporting was taking place. As a result, clarity was established and the procedures in Kentucky have been improved to coincide with the revised directive.

This evaluation year has also been a year of significant improvements with the e-AMLIS mapping functionality. Although the data in the inventory was accurate, the mapping capabilities were extremely limited due to the difficulty of compiling data from different sources and into one platform for display and use. The coordinated effort between the DAML staff and the Headquarters AML staff has been a great benefit.

In EY 2014, 57 Problem Areas have been updated or entered into the e-AMLIS. When new AML problems are discovered and DAML is preparing to plan their workload, the required information is entered into the database to characterize the site conditions and eventually estimated costs for future project construction. However, there can be updates to e-AMLIS entries from the time a project first submitted for approval until the project is completed. The total costs that have been documented in e-AMLIS in 2012 (including funded projects, unfunded projects and completed projects) were over 20 million dollars.

B. AMD Set Aside

AMD funds are authorized by SMCRA to address the costs associated with accomplishing AMD remediation of AML eligible problems, such as program administration, planning,

design, construction, and construction monitoring. This program area has had a short history in Kentucky, as the first AMD project was announced in April 2008. In EY 2014, KYDNR has three ongoing projects. These AMD projects are: Kimbler Castle AMD Reclamation Project (Johnson Co.), Hurricane Creek Reclamation Project (Pike County), and the Mile Branch Reclamation Project. (Pike Co). These three AMD projects totaled \$1,061,000.00 in expenditures in EY 2014. This brings the KYDNR AMD fund completed project total from the account to over \$14 million.

C. AML Enhancement Rule

The AML Enhancement Rule (ENH) guidelines were published in the Federal Register on February 12, 1999. The rule enacted to allow for incidental coal removal requiring a determination under the provision of CFR 707 and 874.16. Commercial coal mining has occurred in Kentucky since the early 1800s, and with changes in technology and mining methods, previously mined sites around Kentucky may have marketable coal onsite. Some of these areas may not otherwise have an opportunity of being reclaimed for various reasons, but the AML Enhancement Rule creates an opportunity a contractor to remove the incidental coal from the site and sell it to offset the cost of the reclamation effort. When the reclamation projects are completed, these sites are left in a more productive state for the environment, and the reclamation cost to the AML program is significantly less.

In past years, KYDNR requested authorization to proceed on twenty-one ENH projects. In most cases for an enhancement project to be considered completed by KYDNR, all refuse removal and initial reclamation by the contractor, and the State funded portion of the government financed project must have been removed. This government funded portion generally involves the tree planting and monitoring for a year. In EY 2014, KYDAML has completed one ENH project.

During the EY, KYDNR requested authorization to proceed on three new ENH projects:

- 1) Carbon Glow AML Enhancement Project (Letcher County),
- 2) Feds Creek AML Enhancement Project (Pike County),
- 3) and the amended Wheelwright AML Enhancement Project (Letcher County)

These projects are all located in Eastern Kentucky, and are estimated to save the AML fund approximately \$171,000. The refuse removal from these sites reclaims approximately 39.90 acres using loaders and coal trucks. The refuse will be hauled on private or public roads to nearby permanent program permitted coal facilities for processing and waste disposal for the

non-marketable portion. Generally, no processing of the refuse is performed on the AML project sites. However, some mechanical separation of rock impurities is allowed on a case-by-case basis. All of the projects require the contractor to reclaim the areas to a pre-mining configuration, establish a growth medium on the surface, and establish a general vegetative cover. KYDNR will then plant trees on the sites using AML funds usually within the following two years when tree seedling survival conditions are optimum. With proper planning and the correct conditions at the site, the Forestry Reclamation Approach (FRA) may be used for reforestation on these sites.

D. AML Water Supply Projects

KYDNR provides AML funds for water supply projects that are administered by local governments, such as city, county, and/or public water commission agencies. The projects provide municipal domestic water supply to areas where private domestic water supplies (dug or drilled wells) have been impacted by AML eligible coal mining operations. Frequently these projects combine other federal, state, and local governmental funds to provide public water to a larger area. The other sources of funds would allow non-AML impacted areas to also receive the public water. AML funds a portion of the cost of these water replacement projects based on the mining impacts found in groundwater quality studies. The funds are most commonly used to install water storage tanks, booster pump stations, and residential water meters and/or extend or enhance existing water trunk lines and water facilities serving AML impacted areas.

Based on information from closed AML grants, KYDNR has expended over \$118 million dollars for waterline improvements and has provided over 15,566 households with potable water supplies.. During EY 2014, KYDNR submitted, and OSMRE authorized, nine new projects, 53 miles of new water lines that will upgrade and/or extend existing water supply facilities to provide safe domestic water supplies for about 501 new residential customers at an estimated cost of \$19,707,862.

The proposed projects are located in Eastern Kentucky and are listed: 1) Payne Gap Water Supply Project (Letcher County) 2) Deane Phase III AML Water Supply Project (Letcher County) 3) Pine, Pert & Cram Creek AML Water Supply Project (Letcher County), 4) Carr Creek Multi Site AML Water Supply Project, 5) Morgan Multi-site AML Water Supply Project (Morgan County), 6) Bart Branch AML Water Supply (Johnson County), 7) South Perry Phase IV AML Water Supply (Perry County), 8) Upper River Road & Slabtown Road AML Water Supply Project (Perry County), 9) Stratton Branch AML Water Supply (Floyd County)



**Pump Station at Mary/Bethany
Water Supply in Wolfe Co.**



**Tank at HWY 476 Storage Tank
and Pump Station WSP**

During waterline installation, it is sometimes necessary for KYDAML to cross under water bodies (such as streams, rivers, and lakes), railroads, and major highways. Traditionally, this involved “sinking” a pipe across a lake or open cutting a creek and encasement in concrete of waterlines. The waterline would still be exposed to impacts from the currents and materials carried by the water body. Crossing railroads and highways could involve significant traffic holdups, affect existing facilities, and sometimes require extensive negotiation with the railroad or highway departments. KYDAML, in an effort to protect and preserve the environment, is currently allowing waterline construction companies to directionally drill beneath lakes, rivers, stream channels, railroad tracks, or any other structures that could possibly be damaged due to the construction efforts. This is necessary mainly for perennial streams or watersheds that have the potential for protected species to be impacted.

The following projects were completed during the evaluation year. 1) Route 582 Phase 1 AML Water Supply (Knott County); 2) Copeland Duck Hollow River Caney AML Water Supply Project (Breathitt County); 3) Grannie Crane Branch AML Water Supply Project 4) Hazard Multi-site AML Water Supply Project (Perry County); 5) Pine, Pert, and Cram Creek Phase 1 AML Water Supply Project (Letcher County); 6) Payne Gap Phase 2 AML Water Supply Project (Letcher County); and 7) Quicksand Tank Water Supply Project (Breathitt County).

E. Enhancement and Performance Review Results

LFO conducted 249 enhancement and performance review inspections on State DAML projects in accordance with the EY 2014 Performance Agreement. The breakdown in the inspection types are as follows:

- 18 pre-authorization inspections
- 51 pre-construction inspections

- 119 active construction inspections
- 51 final construction inspections
- 9 post-construction & follow-up inspections

OSMRE identified 13 concerns during inspections of 11 DAML projects. The slight increase in concerns identified in EY 2014 compared to the previous year is a result of the emphasis on active inspections, and the inspectors are encouraged to discuss concerns with DAML staff to resolve issues in the field. Most of the concerns involve sediment control installation and effectiveness during construction. DAML has made strides in this area by utilizing different materials to improve the effectiveness of erosion control, and this has been noticed in the field with better overall compliance regarding sediment control.

The OSMRE AML inspectors describe the concerns in their reports to document the nature of the problem. All thirteen of the concerns were deemed 'Minor' in nature with a few concerns yet to be resolved. Follow-up inspection are planned to determine if, and when the concerns are to be resolved. During the EY, DAML performed all construction monitoring in-house with State personnel and DAML conducts periodic, monthly, and final construction inspections. In all cases of minor concerns that were resolved, KYDNR took swift, decisive action to notify the contractors of their obligations under their Reclamation Agreements and effect compliance with the authorized project conditions and specifications. Seven of the concerns pertained to water quality, drainage and sediment control issues, two were related to NEPA documentation, one was for a project design issue, one was for a Fish and Wildlife concern, and one was for a previous unresolved concern, and one concern relating to an off-site fill.

Currently, OSMRE is shifting the performance review process in accordance with the newly revised Directive AML-22, which was approved on March 28, 2013. The routine method that was utilized for program oversight was internal reviews and project inspections. AML-22 offers standardized templates for gathering data, including Topic Specific Oversight Reports. These reports will allow for a more thorough review of the AML program, by focusing on areas outside of project implementation such as budget and staffing, grant drawdowns, and the AML inventory system (AMLIS) data maintenance. During EY 2014 we were not able to complete a review due to personnel shortfalls. The Topic Specific Oversight Report will be completed during EY 2015.

Detailed background information and comprehensive reports for the program elements evaluated during the period are available for review and copying by contacting Robert S. Evans, Field Office Director at the OSMRE Lexington Field Office, 2675 Regency Road, Lexington, Kentucky 40503 or by emailing bevans@Osmre.gov. Topic specific reports are available at <http://odocs.Osmre.gov> on OSMRE's website. Requests for paper or electronic copies can also be requested by writing to:

Robert S. Evans, Field Office Director
Office of Surface Mining
2675 Regency Road
Lexington, Kentucky 40503

APPENDIX A

Acronyms Used in this Report

Acronyms Used In the Report

The following acronyms are used in this report:

A&E	Administration and Enforcement
ACSI	Appalachian Clean Streams Initiative
AMD	Acid Mine Drainage
AML	Abandoned Mine Land
AMLIS	Abandoned Mine Land Inventory System
AOC	Approximate Original Contour
ARC	Appalachian Regional Commission
ARRI	Appalachian Regional Reforestation Initiative
BG	Backfilling and Grading Performance Standard
BLM	Bureau of Land Management
BO	Biological Opinion
CHIA	Cumulative Hydrologic Impact Assessment
CIA	Cumulative Impact Area
CO	Cessation Order
COE	U.S. Army Corps of Engineers
CR	Contemporaneous Reclamation Performance Standard
CRI	Citizens' Request for Inspection
CWA	Clean Water Act
CY	Calendar Year
DAML	Division of Abandoned Mine Lands
DBNF	Daniel Boone National Forest
DEP	Department of Environmental Protection
DMP	Kentucky Division of Mine Permits
DMR	Discharge Monitoring Reports
DMRE	Kentucky Division of Mine Reclamation and Enforcement
DOI	Department of Interior
DOW	Division of Water
ECP	Enhanced Coordination Procedures
EEC	Environment and Energy Cabinet
ENH	AML Enhancement Rule
EQC	Environmental Quality Commission
EPPC	Environmental and Public Protection Cabinet
ER	Enhancement Rule
ESA	Endangered Species Act
EY	Evaluation Year
FOD	Field Office Director
FPOP	Fill Placement Optimization Process

FRA	Forestry Reclamation Approach
FY	Fiscal Year
GFW	Green Forest Works
GIS	Geographic Information System
HUC	Hydrologic Unit Code
I&E	Inspection and Enforcement
IP	Individual Permit
KDF	Kentucky Division of Forestry
KDFWR	Kentucky Department of Fish and Wildlife Resources
KGS	Kentucky Geological Survey
KPDES	Kentucky Pollutant Discharge Elimination System
KRGF	Kentucky Reclamation Guaranty Fund
KY	Kentucky
KYDNR	Kentucky Department for Natural Resources
LCC	Lexington Coal Company
LFO	Lexington Field Office
LTT	Long-Term Treatment
MRP	Mining Reclamation Plan
MSHA	Mine Safety and Health Administration
MTM	Mountain Top Mining
NRHP	National Register of Historical Places
NC	Notice of Non-Compliance
NELAC	National Environmental Laboratory Accreditation Conference
NEPA	National Environmental Protection Act
NMMR	National Mine Map Repository
NOI	Notice of Intent to Sue
NOV	Notice of Violation
NPDES	National Pollutant Discharge Elimination System
OGRF	Office of Guaranty Reclamation Fund
OIG	Office of Inspector General within Department of Interior
OMSL	Office of Mine Safety and Licensing
OSMRE	Office of Surface Mining Reclamation and Enforcement
OSRW	Outstanding State Resource Water
PEP	Protection and Enhancement Plan
PMLU	Post-Mining Land Use
PAD	Problem Area Descriptions
PU	Project Unit
QA/QC	Quality Assurance/Quality Control
RA	Regulatory Authority
RAM	Reclamation Advisory Memorandum

RD	Regional Director
SCP	Subsidence Control Plans
SHPO	State Historic Preservation Officer
SMCRA	Surface Mining Control and Reclamation Act of 1977
SMIS	Surface Mining Information System
STORET	Storage and Retrieval Data Warehouse
T&E	Threatened and Endangered
TDN	Ten-Day Notice
TIPS	Technical Innovation and Professional Services
TVA	Tennessee Valley Authority
UK	University of Kentucky
USFWS	U.S. Fish and Wildlife Service
VER	Valid Existing Rights

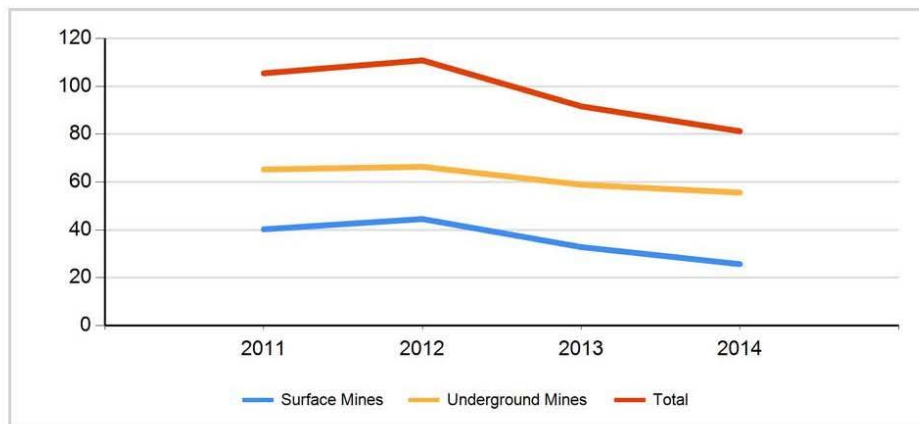
APPENDIX B
Tabular Summary of Core Data
To Characterize the Program

TABLE 1

COAL PRODUCED FOR SALE , TRANSFER, OR USE ^A (Millions of short tons)			
Calendar Year	Surface Mines	Underground Mines	Total
2010	40.2	65.2	105.4
2011	44.5	66.3	110.8
2012	32.8	58.9	91.6
2013	25.6	55.6	81.2

^A Coal production is the gross tonnage (short tons) and includes coal produced during the calendar year (CY) for sale, transfer or use. The coal produced in each CY quarter is reported by each mining company to OSM during the following quarter on line 8(a) of form OSM-1, "Coal Reclamation Fee Report." Gross tonnage does not provide for a moisture reduction. OSM verifies tonnage reported through routine auditing of mining companies. This production may vary from that reported by other sources due to varying methods of determining and reporting coal production.

TABLE 1
COAL PRODUCED FOR SALE, TRANSFER, OR USE
DURING THE CALENDAR YEAR
(Millions of short tons)



COAL PRODUCED FOR SALE , TRANSFER, OR USE ^A
(Millions of short tons)

Calendar Year	Surface Mines	Underground Mines	Total
2010	40.2	65.2	105.4
2011	44.5	66.3	110.8
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TABLE 2

PERMANENT PROGRAM PERMITS, INITIAL PROGRAM SITES, INSPECTABLE UNITS, AND EXPLORATION														
Mines and Other Facilities	Numbers of Permanent Program Permits and Initial Program Sites								Insp. Units ^{1,2}	Area in Acres ³				Total Area
	Permanent Program Permits				Initial Program Sites					Permanent Program Permits (Permit Area)		Initial Program Sites		
	Active	Inactive	Abandoned	Total	Active	Inactive	Abandoned	Total		Federal Lands	State/ Tribal and Private Lands	Federal Lands	State/ Tribal and Private Lands	
Surface Mines	784	36	12	832	0	0	0	0	832	7,157	500,810	0	0	507,967
Underground Mines	581	7	2	590	0	0	2	2	592	122,211	1,369,992	0	9	1,492,212
Other Facilities	317	5	2	324	0	0	0	0	324	475	54,938	0	0	55,413
Total	1,682	48	16	1,746	0	0	2	2	1,748	129,843	1,925,740	0	9	2,055,592
Permanent Program Permits and Initial Program Sites (Number on Federal Lands: 0)				Total Number:		1,748		Average Acres per Site:				1,175.97		
Average Number of Permanent Program Permits and Initial Program Sites per Inspectable Unit (IU):				Total Number:		1.00		Average Acres per IU:				1,175.97		
Permanent Program Permits in Temporary Cessation:				Total Number:		181		Number More than 3 Years:				43		
EXPLORATION SITES				Total Number of Sites				Sites on Federal Lands ⁴				Exploration Inspectable Units		
Exploration Sites with Permits:				1				0				0		
Exploration Sites with Notices:				267				0				0		
¹ An Inspectable Unit may include multiple small and neighboring Permanent Program Permits or Initial Program Sites that have been grouped together as one Inspectable Unit, or conversely, an Inspectable Unit may be one of multiple Inspectable Units within a Permanent Program Permit.														
² Total Inspectable Units calculation includes Exploration Sites Inspectable Units														
³ When a Permanent Program Permit or Initial Program Site contains both Federal and State and Private lands, the acreage for each type of land is in the applicable column.														
⁴ The number of Exploration Sites on Federal lands includes sites with exploration permits or notices any part of which is regulated by the state under a cooperative agreement or by OSM pursuant to the Federal Lands Program, but excludes exploration sites that are regulated by the Bureau of Land Management														

TABLE 3

PERMITS ALLOWING SPECIAL CATEGORIES OF MINING			
Special Category of Mining	30 CFR Citation Defining Permits Allowing Special Mining Practices	Numbers of Permits	
		Issued During EY	Total Active and Inactive Permits
Experimental Practice	785.13(d)	0	7
Mountaintop Removal Mining	785.14(c)(5)	0	48
Steep Slope Mining	785.15(e)	0	113
AOC Variances for Steep Slope Mining	785.16(b)(2)	0	90
Prime Farmlands Historically Used for Cropland	785.17(e)	0	86
Contemporaneous Reclamation Variances	785.18(c)(9)	6	178
Mining on or Adjacent to Alluvial Valley Floors	785.19(e)(2)	0	0
Auger Mining	785.20(c)	33	697
Coal Preparation Plants Not Located at a Mine Site	785.21(c)	0	157
In-Situ Processing	785.22(c)	0	0
Remining	773.15(m) and 785.25	7	356
Activities in or Within 100 Feet of a Perennial or Intermittent Stream	780.28(d) and/or (e) 784.28(d) and/or (e)	0	0

**CHART 3A HISTORICAL TRENDS
PERMITS ALLOWING SPECIAL CATEGORIES OF MINING**

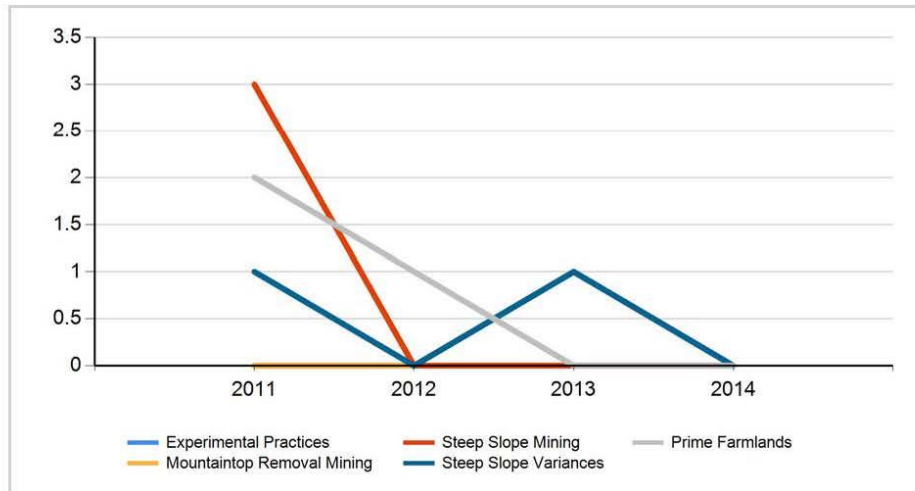


TABLE 3A

NUMBER OF PERMITS ISSUED AND REVISIONS APPROVED					
Year	Experimental Practices	Mountaintop Removal Mining	Steep Slope Mining	Steep Slope Variances	Prime Farmlands
2011	0	0	3	1	2
2012	0	0	0	0	1
2013	1	1	0	1	0
2014	0	0	0	0	0

Kentucky
EY 2014, ending June 30, 2014

**CHART 3B HISTORICAL TRENDS
PERMITS ALLOWING SPECIAL CATEGORIES OF MINING**

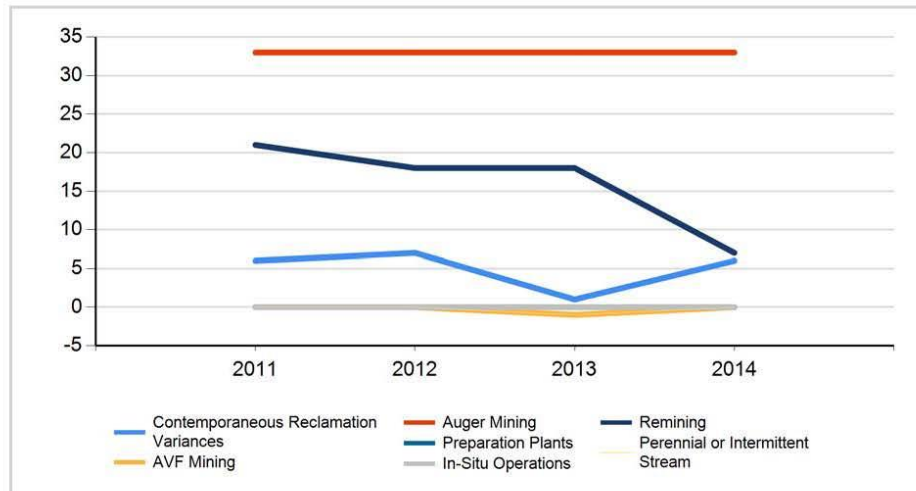


TABLE 3B

NUMBER OF PERMITS ISSUED AND REVISIONS APPROVED							
Year	Contemporaneous Reclamation Variances	AVF Mining	Auger Mining	Preparation Plants Not at Mine Site	In-Situ Operations	Remining	Perennial/ Intermittent Streams
2011	6	0	33	0	0	21	0
2012	7	0	33	0	0	18	0
2013	1	N/A	33	0	0	18	N/A
2014	6	0	33	0	0	7	0

TABLE 4

PERMITTING ACTIVITY												
Type of Application	Surface Mines			Underground Mines			Other Facilities			Totals		
	App. Rec.	Issued/ Appvd	Acres	App. Rec.	Issued/ Appvd	Acres¹	App. Rec.	Issued/ Appvd	Acres	App. Rec.	Issued/ Appvd	Acres
New Permits	32	29	8,048	5	14	47,622	7	5	926	44	48	56,596
Renewals	74	63		134	101		119	63		327	227	
Transfers, sales, and assignments of permit rights	96	92		49	36		42	43		187	171	
Small operator assistance	0	5		0	0		0	0		0	5	
Exploration permits										0	0	
Exploration notices²											0	
Revisions that do not add acreage to the permit area	0	16		0	8		0	6		0	30	
Revisions that add acreage to the permit area but are not incidental boundary revisions	71	53	6,989	31	32	33,911	26	12	828	128	97	41,728
Incidental boundary revisions	203	192	303	120	105	101	60	40	40	383	337	444
Totals	476	450	15,340	339	296	81,634	254	169	1,794	1,069	915	98,768
Permits terminated for failure to initiate operations:									Number:	0	Acres:	0.0
Acres of Phase III bond releases (Areas no longer considered to be disturbed):											Acres:	12,780.0
Permits in temporary cessation							Notices received:		146	Terminations:		40
Midterm permit reviews completed							Number:		506			
¹Includes only the number of acres of proposed surface disturbance												
²State approval not required. Involves removal of less than 250 tons of coal and does not affect lands designated unsuitable for mining.												

TABLE 5

OFF-SITE IMPACTS EXCLUDING BOND FORFEITURE SITES													
RESOURCES AFFECTED		People			Land			Water			Structures		
DEGREE OF IMPACT		Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major
TYPE OF IMPACT EVENT	NUMBER OF EVENTS												
Blasting	6	1	1	0	2	2	0	0	0	0	0	0	0
Land Stability	148	0	0	1	123	6	4	4	0	0	5	3	2
Hydrology	135	0	0	0	0	0	0	121	6	6	0	2	0
Encroachment	69	0	0	0	51	9	9	0	0	0	0	0	0
Other	23	1	0	0	0	0	0	0	0	0	22	0	0
Total	381	2	1	1	176	17	13	125	6	6	27	5	2
Total Number of Inspectable Units ¹ :				1742									
Inspectable Units with one or more off-site impacts:				229									
Exploration Inspectable Units with one or more off-site impacts ² :				0									
Inspectable Units free of off-site impacts:				1513				% of Inspectable Units free of off-site impacts ⁴ :				87	
¹ Total number of Inspectable Units is (1) the number of active and inactive inspectable units at the end of the Evaluation Year and (2) the number of Inspectable Units that were final bond released or removed during the Evaluation Year													
² Exploration Inspectable Units with one or more off-site impacts is a subset of Inspectable Units with one or more off-site impacts													
OFF-SITE IMPACTS AT BOND FORFEITURE SITES													
RESOURCES AFFECTED		People			Land			Water			Structures		
DEGREE OF IMPACT		Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major
TYPE OF IMPACT EVENT	NUMBER OF EVENTS												
Blasting	0	0	0	0	0	0	0	0	0	0	0	0	0
Land Stability	94	0	0	0	34	17	43	0	0	0	0	0	0
Hydrology	0	0	0	0	0	0	0	0	0	0	0	0	0
Encroachment	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	94	0	0	0	34	17	43	0	0	0	0	0	0
Total Number of Inspectable Units ³ :				97									
Inspectable Units with one or more off-site impacts:				94									
Inspectable Units free of off-site impacts:				3				% of Inspectable Units free of off-site impacts ⁴ :				3	
³ Total number of Inspectable Units is (1) the number of bond forfeiture sites that were reclaimed during the Evaluation Year and (2) the number of bond forfeiture sites that were unreclaimed at the end of the Evaluation Year													

TABLE 5
(Continued)

TOTAL OFF-SITE IMPACTS INCLUDING BOND FORFEITURE SITES													
RESOURCES AFFECTED		People			Land			Water			Structures		
DEGREE OF IMPACT		Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major
TYPE OF IMPACT EVENT	NUMBER OF EVENTS												
Blasting	6	1	1	0	2	2	0	0	0	0	0	0	0
Land Stability	242	0	0	1	157	23	47	4	0	0	5	3	2
Hydrology	135	0	0	0	0	0	0	121	6	6	0	2	0
Encroachment	69	0	0	0	51	9	9	0	0	0	0	0	0
Other	23	1	0	0	0	0	0	0	0	0	22	0	0
Total	475	2	1	1	210	34	56	125	6	6	27	5	2
Total Number of Inspectable Units ⁵ :				1839									
Inspectable Units with one or more off-site impacts:				323									
Exploration Inspectable Units with one or more off-site impacts:				0									
Inspectable Units free of off-site impacts:				1516									
				% of Inspectable Units free of off-site impacts ⁴ :								82	
⁴ % of Inspectable Units free of off-site impacts is based on the number of Inspectable Units during the Evaluation Year. The number of Inspectable Units may vary during the Evaluation Year.													
⁵ Total number of Inspectable Units is (1) the number of active and inactive Inspectable Units at the end of the Evaluation Year and (2) the number of Inspectable Units that were final bond released or removed during the Evaluation Year and (3) the number bond forfeiture sites that were reclaimed during the Evaluation Year and (4) the number of bond forfeiture sites that were unreclaimed at the end of the Evaluation Year.													

TABLE 6

SURFACE COAL MINING AND RECLAMATION ACTIVITY							
Areas of Phase I, II, and III Bond Releases During the Evaluation Year (EY)							
Phase I Releases	Phase II Releases		Phase III Releases			Total Acres Released During the EY	
Total Acres Released in Approved Phase I Releases	Total Acres Released in Approved Phase II Releases	Acres not previously released under Phase I	Total Acres Released in Approved Phase III Releases	Acres not previously released under Phase II	Acres not previously released under Phase I or II		
22,706		188			0	Phase I	22,894
	5,078			0		Phase II	5,078
			12,780			Phase III	12,780
Number of Permanent Program Permits with Jurisdiction Terminated Under Phase III Bond Release During the Evaluation Year					88	Other Releases - Acres	
Initial Program Sites with Jurisdiction Terminated During the Evaluation Year					0	Administrative Adjustments	15344
Number of Inspectable Units Removed					88	Bond Forfeiture	137
Areas of Permits Bonded for Disturbance by Surface Coal Mining and Reclamation Operations							

	Total Acres at Start of EY	Total Acres at End of EY	Change in Acres During EY
New Area Bonded for Disturbance			0
Total Area Bonded for Disturbance	300,807	272,410	(28,397)
Area Bonded for Disturbance without Phase I Bond Release	265,194	249,058	(16,136)
Area Bonded for Disturbance for which Phase I Bond Release Has Been Approved	35,606	40,181	4,575
Area Bonded for Disturbance for which Phase II Bond Release Has Been Approved	10,854	9,774	(1,080)
Area Bonded for Disturbance with Bonds Forfeited During Evaluation Year			273
Area Bonded for Remining	0	931	931
Areas of Permits Disturbed by Surface Coal Mining and Reclamation Operations			
Disturbed Area	246,311	242,649	N/A

TABLE 7

BOND FORFEITURE ACTIVITY (Permanent Program Permits)			
Bond Forfeiture and Reclamation Activity	Number of Sites	Dollars	Acres
Sites with bonds forfeited and collected that were un-reclaimed at the start of the current Evaluation Year (i.e, end of previous Evaluation Year) ¹	89		2,741
Sites with bonds forfeited and collected during the current Evaluation Year	8	821,524	273
Sites with bonds forfeited and collected that were re-permitted during the current Evaluation Year	0		0
Sites with bonds forfeited and collected that were reclaimed during the current Evaluation Year	3		137
Sites with bonds forfeited and collected that were un-reclaimed at the end of the current Evaluation Year ¹	94		2,877
Sites with bonds forfeited but un-collected at the end of the current Evaluation Year	0		0
Forfeiture Sites with Long-Term Water Pollution			
Bonds forfeited, lands reclaimed, but water pollution is still occurring	0		
Bonds forfeited, lands reclaimed, and water treatment is ongoing	0		
Surety/Other Reclamation Activity In Lieu of Forfeiture			
Sites being reclaimed by surety/other party at the start of the current Evaluation Year (i.e., the end of previous Evaluation Year) ²	5		778
Sites where surety/other party agreed during the current Evaluation Year to do reclamation	0		0
Sites being reclaimed by surety/other party that were re-permitted during the current Evaluation Year	1		636
Sites with reclamation completed by surety/other party during the current Evaluation Year ³	0		0
Sites being reclaimed by surety/other party at the end of the current Evaluation Year ²	4		142
¹ Includes data only for those forfeiture sites not fully reclaimed. ² Includes all sites where surety or other party has agreed to complete reclamation and the site is not fully reclaimed. ³ These sites are also reported in Table 6, Surface Coal Mining and Reclamation Activity, because Phase III bond release would be granted on these sites.			

Kentucky
EY 2014, ending June 30, 2014

**CHART 7A HISTORICAL TRENDS
NUMBER OF BOND FORFEITURE SITES**

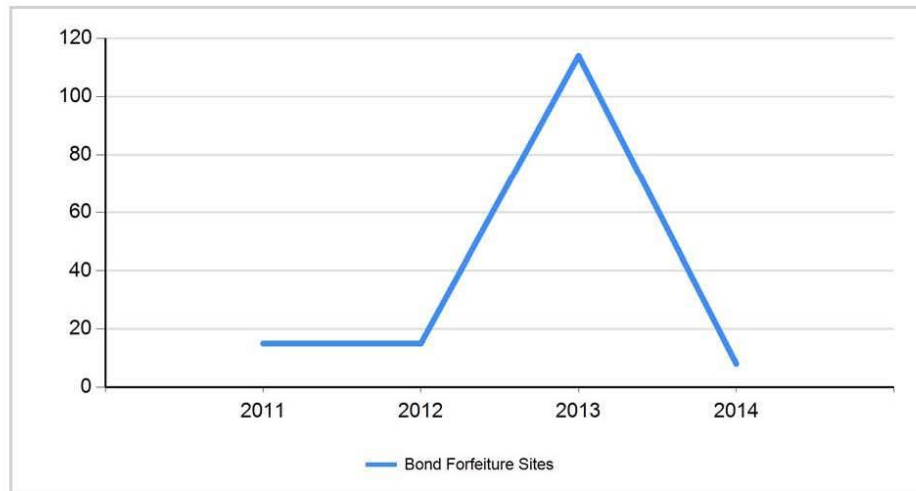


TABLE 7A

NUMBER OF BOND FORFEITURE SITES	
Year	Bond Forfeiture Sites
2011	15
2012	15
2013	114
2014	8

Kentucky
EY 2014, ending June 30, 2014

**CHART 7B HISTORICAL TRENDS
ACREAGE OF BOND FORFEITURE SITES**

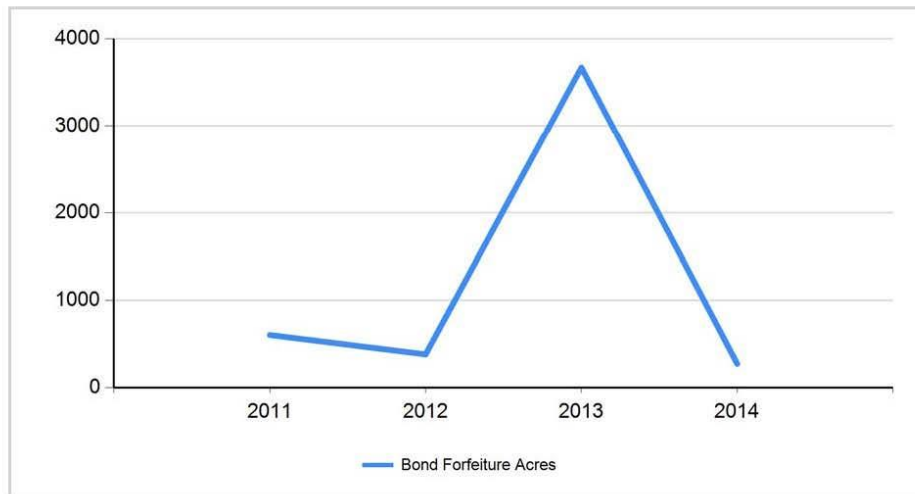


TABLE 7B

ACREAGE OF BOND FORFEITURE SITES	
Year	Acres
2011	603
2012	381
2013	3671
2014	273

Kentucky
EY 2014, ending June 30, 2014

**CHART 7C HISTORICAL TRENDS
NUMBER OF SITES WITH WATER POLLUTION STILL
OCCURRING**

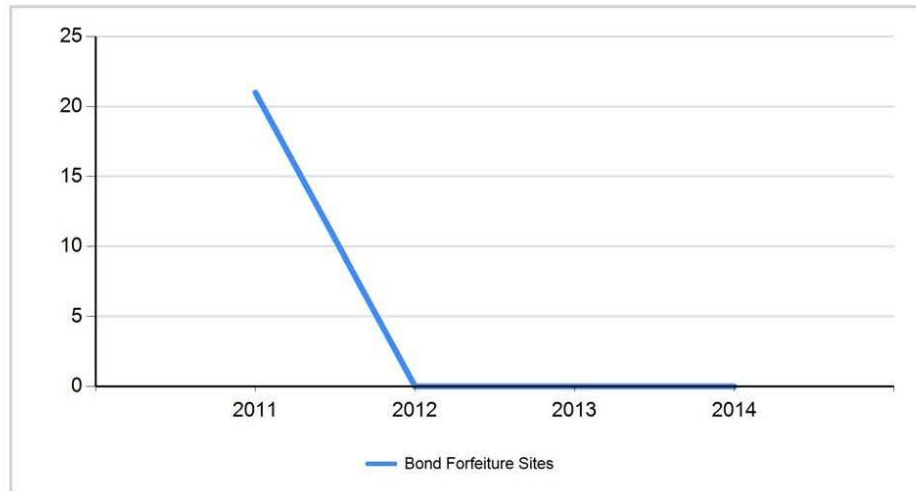


TABLE 7C

NUMBER OF SITES WITH WATER POLLUTION STILL OCCURRING	
Year	Sites
2011	21
2012	0
2013	0
2014	0

Kentucky
EY 2014, ending June 30, 2014

**CHART 7D HISTORICAL TRENDS
NUMBER OF SITES WITH WATER TREATMENT ONGOING**

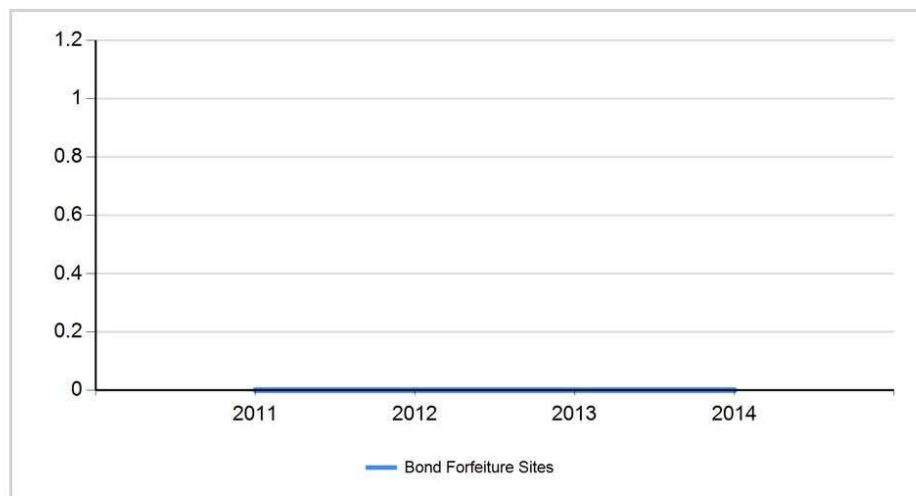


TABLE 7D

NUMBER OF SITES WITH WATER TREATMENT ONGOING	
Year	Sites
2011	0
2012	0
2013	0
2014	0

Kentucky
EY 2014, ending June 30, 2014

TABLE 8

REGULATORY AND AML PROGRAMS STAFFING	
Function	Number of FTEs
Regulatory Program	
Permit Review and Maintenance	62.50
Inspection	157.49
Other (supervisory, clerical, administrative, fiscal, personnel, etc.)	26.00
Regulatory Program Total	245.99
AML Program Total	88.48
TOTAL	334.47

Kentucky
EY 2014, ending June 30, 2014

**CHART 8A HISTORICAL TRENDS
REGULATORY AND AML PROGRAMS STAFFING**

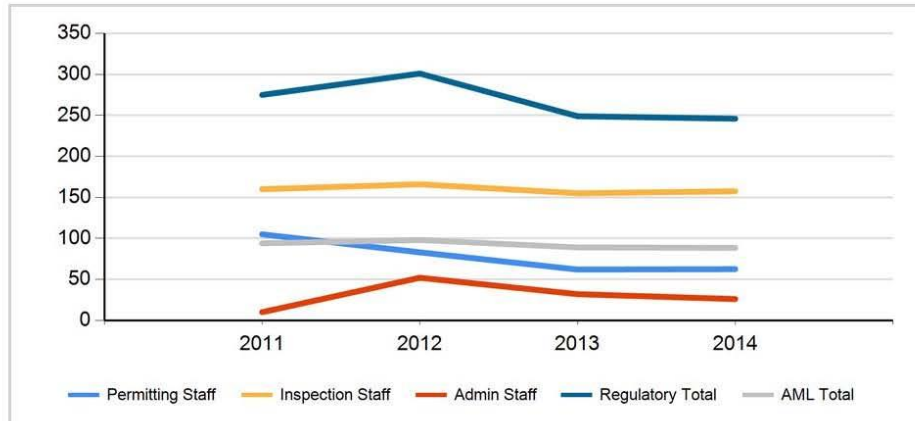


TABLE 8A

REGULATORY AND AML PROGRAMS STAFFING					
Year	Regulatory Program				AML Program
	Permitting	Inspection	Admin	Total	
2011	105	160	10	275	94
2012	83	166	52	301	98
2013	62	155	32	249	89
2014	63	157	26	246	88

TABLE 9

FUNDS GRANTED TO STATE OR TRIBE BY OSM (Actual Dollars Rounded to the Nearest Dollar)			
Type of Funding	Federal Funds Awarded	Total Program Cost	Federal Funds Awarded as a Percentage of Total Program Costs
Regulatory Funding			
Administration and Enforcement Grant	11,798,237		
Other Regulatory Funding, if applicable	0		
Subtotal (Regulatory Funding)	11,798,237	22,181,306	53
Small Operator Assistance Program Grant Funding	0	0	
Abandoned Mine Land Reclamation Funding	36,613,301	0	
Watershed Cooperative Agreement Program	0	0	
TOTAL	48,411,538		

Kentucky
 EY 2014, ending June 30, 2014

**CHART 9A HISTORICAL TRENDS
 FUNDS GRANTED TO STATE OR TRIBE BY OSM**

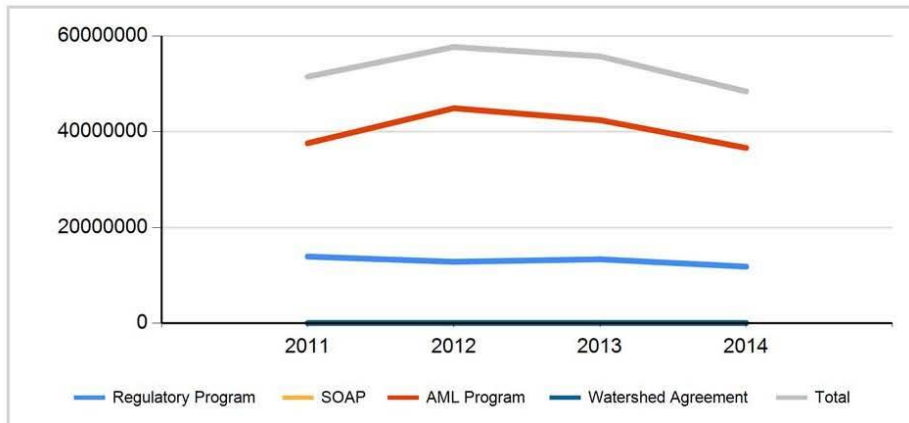


TABLE 9A

FUNDS GRANTED TO STATE OR TRIBE BY OSM				
Year	Regulatory Program	SOAP	AML Program	Total
2011	13,904,250	0	37,591,345	51,495,595
2012	12,806,070	0	44,916,012	57,722,082
2013	13,331,921	0	42,428,406	55,760,327
2014	11,798,237	0	36,613,301	48,411,538

TABLE 10

STATE INSPECTION ACTIVITY
INSPECTABLE UNITS FOR WHICH STATE MET REQUIRED INSPECTION FREQUENCY ON AN
INSPECTABLE UNIT-BY-INSPECTABLE UNIT BASIS ¹

Inspectable Units (IUs)	Total number of inspectable units ²	Number of inspections required annually		Number of inspections conducted		IUs Met Complete Inspection Frequency Requirement		IUs Met Partial Inspection Frequency Requirement		IUs Met Complete and Partial Inspection Frequency Requirements		
		Complete Inspections	Partial Inspections	Complete Inspections	Partial Inspections	Number	Percent	Number	Percent	Total number of IUs	Number that met inspection frequency	Percent
COAL MINES AND FACILITIES												
Active	1682	6728	13456	7227	13135	1672	99	1662	99	1682	1665	99
Inactive	48	192	0	214	83	48	100	48	100	48	48	100
Abandoned	18	18	0	34	29	18	100	18	100	18	18	100
TOTALS ³	1748	6938	13456	7475	13247	1738	99	1728	99	1748	1731	99
Coal Exploration Activities ⁴		Complete Inspections						Partial Inspections				
Exploration sites with permits		4						0				
Exploration sites with notices		870						223				

¹ Calculated on a site-specific basis.² Total number includes both permanent program permits and initial program sites.³ OSM is assuming that all states have gone through the process described in 30 CFR 840.11(h) and 842.11(f) to reduce inspection frequency on abandoned/forfeited sites⁴ Includes all valid notices and permits. No inspection frequency data are provided since SMCRA does not establish a minimum numerical inspection frequency for coal exploration activities.⁵ NA - Not Available

TABLE 11

STATE OR TRIBAL ENFORCEMENT ACTIVITY		
Type of Enforcement Action	Number of Actions ¹	Number of Violations ¹
Notice of Violation	962	1,619
Failure-to-Abate Cessation Order	281	465
Imminent Harm Cessation Order	8	11
¹ Does not include actions and violations that were vacated.		

Kentucky
 EY 2014, ending June 30, 2014

**CHART 11A HISTORICAL TRENDS
 STATE OR TRIBAL ENFORCEMENT ACTIVITY**

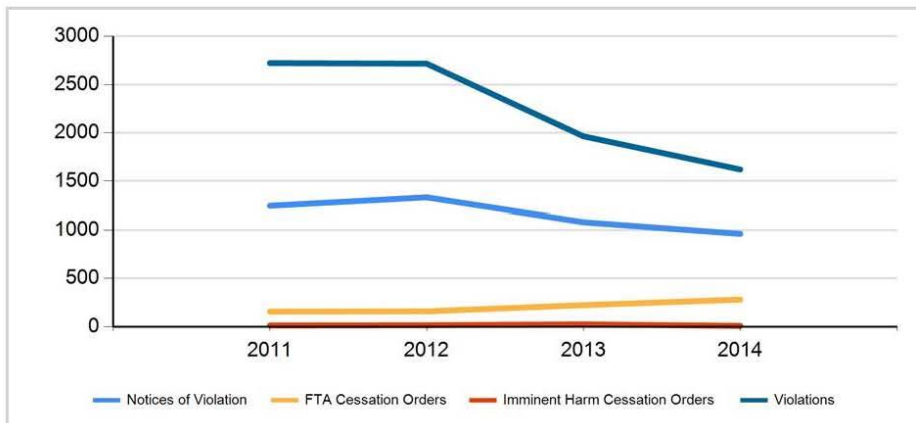


TABLE 11A

STATE OR TRIBAL ENFORCEMENT ACTIVITY				
Year	Notices of Violation	Violations	FTA Cessation Orders	Imminent Harm Cessation Orders
2011	1244	2722	156	12
2012	1331	2716	159	15
2013	1081	1963	223	24
2014	962	1619	281	8

Kentucky

EY 2014, ending June 30, 2014

TABLE 12

LANDS UNSUITABLE ACTIVITY		
Activity	Number	Acres
Petitions Received	0	
Petitions Rejected	0	
Petitions Accepted	0	
Decisions Denying Petition	0	
Decisions Declaring Lands Unsuitable	0	0
Decisions Terminating Unsuitable Designations	0	0

Kentucky
 EY 2014, ending June 30, 2014

**CHART 12A HISTORICAL TRENDS
 LANDS UNSUITABLE ACTIVITY**

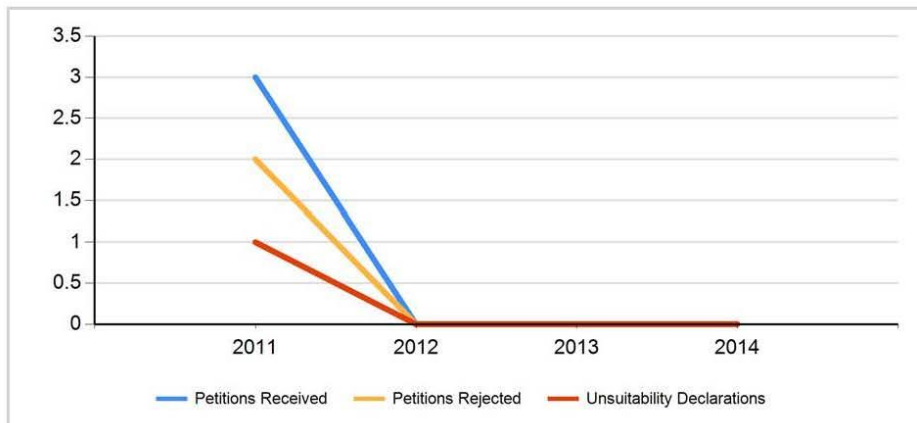


TABLE 12A

LANDS UNSUITABLE ACTIVITY			
Year	Petitions Received	Petitions Rejected	Unsuitability Declarations
2011	3	2	1
2012	0	0	0
2013	0	0	0
2014	0	0	0

Kentucky

EY 2014, ending June 30, 2014

**CHART 12B HISTORICAL TRENDS
ACRES DECLARED UNSUITABLE**

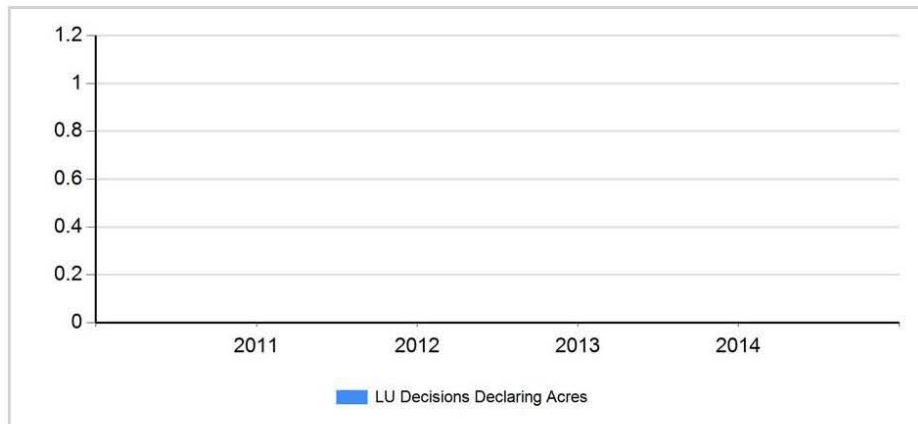


TABLE 12B

ACRES DECLARED UNSUITABLE	
Year	Acres Declared Unsuitable
2011	0.0
2012	0.0
2013	0.0
2014	0.0

TABLE 13

OSM OVERSIGHT ACTIVITY					
Oversight Inspections and Site Visits					
	Complete		Partial		
	Joint	Non-Joint	Joint	Non-Joint	Total
Oversight Inspections	359	7	81	4	451
	Technical Assistance		Other		Total
Site Visits	3		2		5
Violations Observed by OSM and Citizen Requests for Inspection¹					
Type of Action					Total number of each action
How many violations were observed by OSM on oversight inspections?					298
Of the violations observed, how many did OSM defer to State action during inspections?					111
Of the violations observed, how many did OSM refer to the State through Ten-Day Notices? ²					0
How many Ten-Day Notices did OSM Issue for observed violations? ³					0
How many Ten-Day Notices did OSM issue to refer citizen requests for inspection?					11
How many Notices of Violation did OSM issue?					0
How many Failure-to-Abate Cessation Orders did OSM issue?					0
How many Imminent Harm Cessation Orders did OSM issue?					0
OSM Action for Delinquent Reporting or Non-Payment of Federal AML Reclamation Fees					
How many Ten-Day Notices for delinquent reporting or non-payment of Federal AML reclamation fees did OSM issue?					0
How many Notices of Violation for delinquent reporting or non-payment of Federal AML reclamation fees did OSM issue?					0
How many Federal Failure-to-Abate Cessation Orders for delinquent reporting or non-payment of Federal AML reclamation fees did OSM issue?					0
¹ This section does not include actions for delinquent reporting or non-payment of Federal AML fees that are reported in the last section of the table.					
² Number of violations contained in Ten-Day Notices not including those issued to refer citizen requests for inspection.					
³ Number of Ten-Day Notices issued not including those to refer citizen requests for inspection.					

**CHART 13A HISTORICAL TRENDS
OSM OVERSIGHT ACTIVITY**

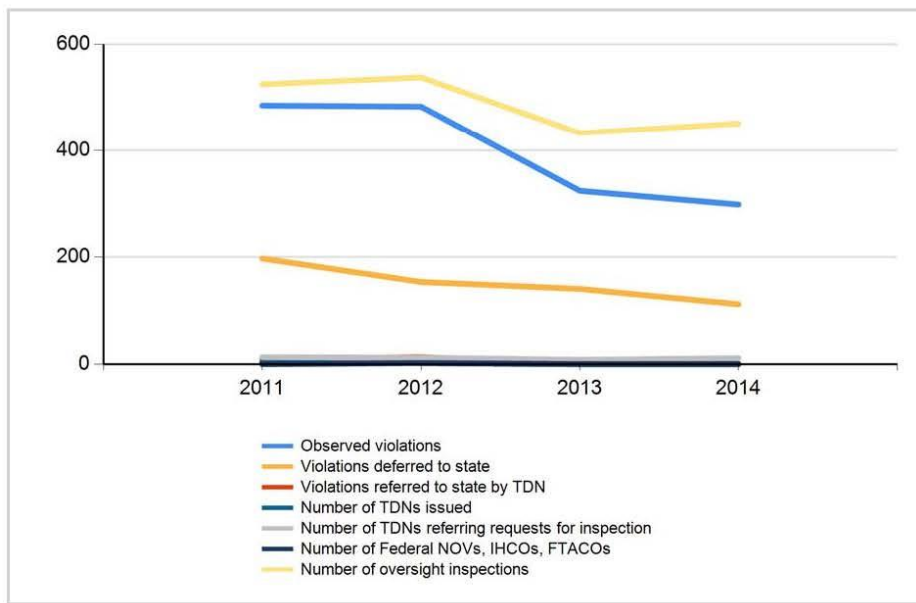


TABLE 13A

OSM OVERSIGHT ACTIVITY							
Year	Number of violations observed on OSM oversight inspections	Number of violations deferred to state action	Number of violations referred to state by TDN	Number of TDN's issued	Number of TDN's issued to refer requests for inspection	Number of Federal NOV, FTACOs, & IHCOs issued	Number of oversight inspections
2011	485	197	10	4	13	0	525
2012	483	153	13	2	12	2	538
2013	324	140	0	0	8	0	433
2014	298	111	0	0	11	0	451

TABLE 14

STATUS OF ACTION PLANS						
Action Plan ID	Problem Type ¹	Problem Title	Problem Description	Date Action Plan Initiated	Scheduled Completion Date	Actual Completion Date
245	RP	Bond Determination	Kentucky does not always have sufficient bond to reclaim bond forfeiture sites.	02/03/2011	6/30/2015	
¹ Problem Type: "PA" indicates a required Program change under subchapter T or 732 "RP" indicates a Regulatory Program implementation or administrative problem						

TABLE 15
(Optional)

POST-MINING LAND USE ACREAGE OF SITES FULLY RECLAIMED (Phase III bond release or termination of jurisdiction under the Initial Program)	
Land Use¹	Acres Released
Cropland	53.00
Pasture/Hayland	3,413.00
Grazingland	4.00
Forestry	1,003.00
Residential	57.00
Industrial/Commercial	435.00
Recreation	510.00
Fish & Wildlife Habitat	7,386.00
Developed Water Resources	0.00
Undeveloped land or no current use or land management	0.00
Other - Public Utilities	0.00
Other -	0.00
Other -	0.00
Other -	0.00
Other -	0.00
Other -	0.00
Other -	0.00
Other -	0.00
Other -	0.00
Sub-Total Other	0.00
Total	12,861.00

¹ Land uses as defined in 30 CFR 701.5 or "Other" as defined under the state or tribal program

Kentucky
EY 2014, ending June 30, 2014

**CHART 15A HISTORICAL TRENDS
POST MINING LAND USE ACREAGES**

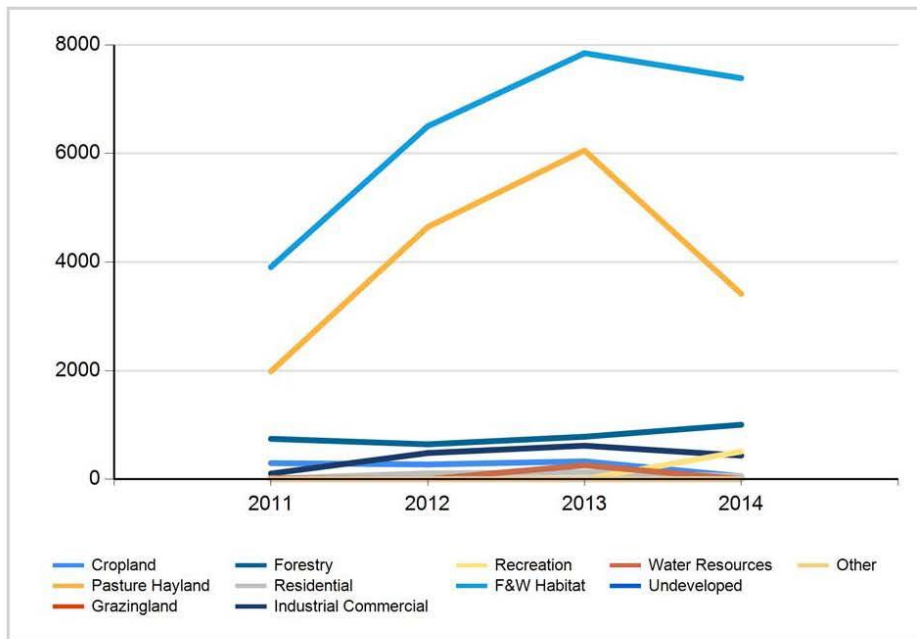


TABLE 15A

Year	Cropland	Pasture Hay	Grazing Land	Forest	Residential	Industrial Comm.	Recreation	F&W Hab.	Water Resources	Undeveloped	Other
2011	296	1984	0	744	10	103	20	3906	17	0	0
2012	272	4644	0	643	107	482	0	6500	0	0	0
2013	329	6055	0	782	129	617	0	7846	256	0	0
2014	53	3413	4	1003	57	435	510	7386	0	0	0

APPENDIX C

State Comments on Report



**ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR NATURAL RESOURCES**

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Governor

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Leonard K. Peters
Secretary

Steve Hohmann
Commissioner

October 24, 2014

Mr. Robert Evans, Field Office Director
Office of Surface Mining
2675 Regency Road
Lexington, Kentucky 40503 – 2922

RE: Draft EY 2014 Annual Evaluation Summary Report

Dear Mr. Evans:

This letter outlines our comments on the draft EY 2014 “Thirty-Second Annual Evaluation Summary Report” received in this office on October 9, 2014 for review and comment. DNR agency personnel in the Commissioner’s Office, Division of Abandoned Mine Land (DAML), Division of Mine Permits (DMP) and the Division of Mine Reclamation and Enforcement (DMRE) have reviewed the draft report and we offer the following minor comments. While some of the following observations are editorial in nature there are a number of substantive suggestions that we would like to offer.

Cover Page – The official name of this agency is the “Kentucky Department for Natural Resources”, not the “Department of Natural Resources of Kentucky” so please modify.

Page 7 – 1st paragraph- 3rd sentence – We suggest that you consider revising this sentence to read “DMRE issued 381 enforcement actions that cited 446 measurable off-site impacts on 229 permits”.

Page 7 – Bond Release – 2nd sentence – We suggest you consider revising this sentence to read “This represents a 56% increase in Phase I bond release acreage over EY 2013 and is most likely a result of bond increases resulting from changes in the base bond amounts, and closure of many mining operations.”

Page 9 – Notice of Intent – 3rd sentence- Please consider revising this sentence to read “Six of the eight shares of the tract are owned by Johnson Family Property, LLC and the remaining two shares by Pike Letcher Land Company.”

Mr. Robert Evans
October 24, 2014
Page 2

Page 9 – Notice of Intent to Sue (NOI) – 2nd paragraph – This paragraph speaks about the NOI filed against Frasure Creek Mining, LLC. Is there any real need to include this statement given that it doesn't pertain to DNR.

Page 11/12 – Budgeting and Staffing – 2nd sentence – Please consider revising this sentence to read “At the end of EY 2013, DMP had a budgeted cap of 75 personnel, but funding reductions and attrition reduced the level of staffing to 65.”

Page 12 – Flyrock from Blasting – Please consider revising this section to read “EY 2014 data flyrock indicate that while the number of flyrock events were significantly reduced, it still remains a concern. There was one flyrock event during this EY that resulted in rocks striking an occupied dwelling. Kentucky DNR and OSM recognize flyrock as a very troublesome and potentially dangerous off-site impact in the state and will continue to elevate blasting enforcement, training and joint studies targeted at reducing the effects of blasting on citizens.”

Page 13 – Experimental Practices – 3rd & 4th sentences – Please revise to read “The preliminary results of this technique were presented by the University of Kentucky and the coal company. The weep berms are designed to improve water quality leaving the mine site.”

Page 15 – Overview of the Kentucky Coal Mining Industry – Please consider including this statement after the 1st sentence “This represents an additional 12.5% decline in annual coal production as compared to CY 2013.”

Page 15 – Overview of the Kentucky Coal Mining Industry – Please consider including this statement after the 1st sentence “This represents an additional decline of 12.5% in annual coal production as compared to CY 2013.” You might also want to consider removing the last two sentences from this paragraph since they aren't accurate.

Page 43 – Division of Mine Permits (DMP) vacancies and Funding – Please consider revising the 2nd and 3rd sentence in this paragraph to read “Since a significant portion of the division's budget is based on fee revenue, the lack of adequate funds resulted in a reduction in the authorized staffing level from 75 personnel in EY 2013 to 65 personnel in EY 2014. This affected the DMP permitting process as compared to what was reported in the last EY.”

Page 49 – Industry Compliance – 2nd sentence in this paragraph – Please consider revising this sentence to read “Industry compliance is a measurement of the number of OSMRE and DNR comprehensive random inspections with no observed violation and expressed as a percentage of the total number of OSMRE and DNR comprehensive random inspections conducted in the EY.”

Page 59 – 1st full sentence – Please consider substituting the word “was” for “will” since this has already occurred.

Page 60 – VIII. OSMRE Assistance – A. Grants – 1st sentence – according to our records OSMRE awarded approximately \$55.4 million to the DNR to fund Title IV and Title V programs.

Mr. Robert Evans
October 24, 2014
Page 3

Page 60 – AML Grant – The Kentucky AML program requested \$42,428,400 to fund 100 percent of the total program costs. This includes \$3,000,000 for the AMD Set-Aside Fund. The AML grant monies funds 98 DAML positions. In FY 2014, OSMRE awarded \$34,925,740 to the Kentucky DAML for their program. The FY 2014 grant included \$5,550,000 in AMD Set-Aside funding.

Page 64 – 2nd paragraph – Please revise this statement to reflect that three (3) of the DAML projects submitted by DAML during the EY were AML enhancement rule projects.

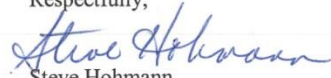
Page 66 – AMD Set Aside – please revise the next to last sentence in the 1st paragraph to reflect that there were three (3) AMD projects, not seven (7), that totaled \$1,061,000 in expenditures in EY 2104.

Page 67 – 1st paragraph – 5th sentence – Please revise this statement to read “However, some mechanical separation of rock impurities is allowed on a case-by-case basis.”

Page 67 – Water Supply Projects – Please revise the 1st sentence in the 2nd paragraph under this section to reflect that DAML expended more than \$118 million dollars for waterline improvements that has provided 15,566 households with potable water supplies.

As always, we sincerely appreciate the opportunity for review and input. Please feel free to contact this office if you have any questions.

Respectfully,


Steve Hohmann
Commissioner

APPENDIX D

**Permittees Issued Non-Compliances by KYDNR
(Listed by Descending Number of Non-Compliances)**

Permittee	# NCs	Violations	Permits in Violation	Total Permits	Permitted Acres	Disturbed Acres
KENTUCKY FUEL CORPORATION	70	101	37	39	53,178.29	6,057.31
REVELATION ENERGY LLC	55	137	23	88	88,044.09	22,166.48
VIRGINIA FUEL CORPORATION	55	72	15	15	17,749.65	1,048.39
SEQUOIA ENERGY LLC	52	87	19	19	27,765.43	1,143.73
FRASURE CREEK MINING LLC	32	67	18	42	30,271.94	15,473.93
MANALAPAN MINING COMPANY INC	28	50	12	12	15,944.86	806.73
T & T ENERGY, LLC	25	59	5	5	1,154.63	602.50
NALLY & HAMILTON ENTERPRISES INC	19	37	14	64	42,730.73	16,300.44
CAMBRIAN COAL CORPORATION	16	21	7	17	6,541.63	3,741.50
IKERD MINING, LLC	15	18	5	5	1,264.52	621.97
PREMIER ELKHORN COAL COMPANY	14	29	9	43	54,847.95	9,060.12
LCC KENTUCKY LLC	14	14	10	13	8,770.86	3,671.94
FCDC COAL INC	12	28	9	29	24,691.41	947.83
B & W RESOURCES INC	12	21	7	21	6,907.01	1,971.38
FOUR STAR RESOURCES LLC	12	19	4	4	858.79	189.22
LANDFALL MINING INCORPORATED	12	19	3	4	96.90	62.00
C & R COAL COMPANY INC	12	16	3	3	797.90	470.00
VIKING ACQUISITION GROUP LLC	11	23	3	3	903.56	225.86
STRAIGHT CREEK COAL MINING INC	10	17	8	36	19,365.02	6,374.54
APEX ENERGY INC	10	15	8	24	14,839.82	3,933.70
MATT/CO INC	10	15	6	23	15,899.49	402.42
ALDEN RESOURCES LLC	9	16	8	21	10,735.80	1,595.90
CLOVERFORK MINING & EXCAVATING INC	9	15	4	4	2,391.84	1,109.49
SANDLICK COAL COMPANY LLC	9	15	6	13	15,084.36	2,367.91
APPOLO FUELS INC	9	14	7	17	12,215.25	1,923.16
MCCOY ELKHORN COAL CORPORATION	8	18	7	33	53,639.78	1,271.62
LEFT FORK MINING COMPANY INC	8	11	3	4	4,445.76	144.55
INFINITY ENERGY, INC	8	9	3	3	1,095.19	450.25
LEE-PAUL COAL COMPANY INC	8	8	2			
BEECH CREEK COAL COMPANY, LLC	7	19	3	1	674.30	164.00
CZAR COAL CORPORATION	7	18	5	20	30,261.06	3,826.57
CAM MINING LLC	7	10	4	24	33,539.59	2,851.67
CRITTENDEN COUNTY COAL INC	7	10	2	2	7,092.70	417.76
DEANE MINING LLC	7	10	5	21	29,124.21	2,303.14
DEEP WOODS MINING LLC	7	10	1	1	293.80	6.00
SAPPHIRE COAL COMPANY	7	10	5	13	17,212.42	931.42
LA ENERGY, LLC	7	7	2	1	92.90	4.00
WEBSTER COUNTY COAL LLC	7	7	7	8	57,396.52	588.60
COAL OPERATORS I LLC	6	11	2	2	421.36	269.00
LOCUST GROVE INC	6	10	5	14	6,265.22	2,243.06
SHAMROCK COAL COMPANY INCORPORATED	6	9	4	7	24,339.33	442.00
BLUE MOUNTAIN MINING, INC	6	8	2			
XCELL ENERGY AND COAL COMPANY, LLC	6	8	1	1	377.16	190.00
MONTIES RESOURCES LLC	6	6	2	1	147.06	31.00
GIRDNER MINING COMPANY INC	5	15	2	2	539.45	27.00

Permittee	# NCs	Violations	Permits in Violation	Total Permits	Permitted Acres	Disturbed Acres
MOUNTAINSIDE COAL CO INC	5	13	4	7	2,160.01	885.60
STONE RIDGE RESOURCES INC	5	12	1	1	37.94	14.00
BLUEBRIDGE MINING GROUP LLC	5	11	1	1	95.00	65.00
CHAS COAL LLC	5	10	1	1	4,676.18	15.00
HARLAN-CUMBERLAND COAL COMPANY LLC	5	8	2	5	13,926.19	566.89
BLACKHAWK MINING LLC	5	7	2	5	2,619.53	94.21
JCMC, LLC	5	7	1	1	94.57	28.00
PINE BRANCH MINING, LLC	5	7	3	13	8,354.50	5,878.01
W & F CONTRACT AUGERING INC	5	7	1	1	37.31	19.00
LEECO INC	5	6	4	21	31,494.53	3,310.88
A & G COAL CORPORATION	5	5	1	1	684.58	220.00
BDCC HOLDING COMPANY INC	5	5	4	23	44,329.35	1,294.57
BETHEL COAL COMPANY, INC	4	13	1	1	85.90	35.00
DUSTY DIAMOND COMPANY INC	4	10	1	1	2,000.31	220.00
MASON COAL INC	4	8	2	3	3,403.78	11.08
ADAMS & BURKE CONTRACTORS & DEVELOPERS LLC	4	7	1	1	110.04	66.00
CHAROLAIS MINING COMPANY, LLC	4	7	1	1	516.50	453.40
BLUE RIDGE EXCAVATING LLC	4	6	1	1	62.00	18.00
EASTERN KENTUCKY MINING INC	4	6	1	1	333.84	90.74
BLEDSE COAL CORPORATION	4	5	3	21	33,353.48	2,344.86
COOK AND SONS MINING INC	4	5	3	3	2,076.59	493.67
KANNAN MINING COMPANY	4	5	1	1	154.71	88.17
MARTIN COUNTY COAL CORPORATION	4	5	4	28	23,298.38	6,934.76
ROAD FORK DEVELOPMENT COMPANY INC	4	5	3	10	24,367.90	921.68
ARMSTRONG COAL COMPANY INC	4	4	4	26	61,879.83	5,690.80
B & R CONSTRUCTION	4	4	1	1	9.22	5.00
JOSHUA ENTERPRISES, INC	4	4	1	1	166.10	120.00
SIDNEY COAL COMPANY INC	4	4	4	41	95,836.91	2,169.74
STRONG BROTHERS MINING	4	4	1	1	161.95	102.84
EMPIRE COAL PROCESSING LLC	3	9	3	3	244.02	85.05
LESLIE MOUNTAIN COAL COMPANY INC	3	8	1	1	267.58	94.74
APPALACHIAN MINING LLC	3	7	1	1	11.00	0.03
BARNETT ENERGY, LLC	3	7	1	1	292.59	85.00
CUZ COAL COMPANY LLC	3	7	1	1	566.37	220.00
RAVEN ENERGY INC	3	7	1	1	216.09	105.00
TWILIGHT ENERGY, LLC	3	7	1	1	24.09	18.96
LAUREL MOUNTAIN RESOURCES LLC	3	6	2	25	15,771.21	8,929.18
MOUNTAIN RECLAMATION AND CONSTRUCTION LLC	3	5	1	2	522.19	210.00
HERITAGE COAL COMPANY LLC	3	4	1	4	29,460.54	1,829.50
ICG HAZARD LLC	3	4	1	27	24,996.50	8,920.52
KEENER RIDGE COALS, INC.	3	4	1	3	775.97	214.00
DAVIS ENERGY, LLC	3	3	2	6	994.95	308.00
PATRIOT COAL COMPANY, LP	3	3	3	15	27,379.57	3,687.40
POWELL BRANCH ENERGY LLC	3	3	1			
C & R HOLDING OF EASTERN KENTUCKY	2	10	1	1	176.75	177.00

Permittee	# NCs	Violations	Permits in Violation	Total Permits	Permitted Acres	Disturbed Acres
LLC						
ADVANCE ENERGY II, LLC	2	6	1	1	237.09	85.00
APPALACHIAN MINING AND RECLAMATION LLC	2	6	2	3	790.69	115.71
HARLAN RECLAMATION SERVICES LLC	2	6	2	40	106,865.09	2,290.02
RIO MINING MANAGEMENT LLC	2	6	1	1	191.70	60.00
CHEYENNE RESOURCES INC	2	5	1	6	3,396.14	2,684.33
J & M EQUIPMENT AND CONSTRUCTION CO INC	2	5	1	1	97.17	94.70
ARGUS ENERGY LLC	2	3	1	6	6,496.89	506.21
LANDMARK MINING COMPANY INC	2	3	1	18	9,565.22	232.25
M J K MINING INCORPORATED	2	3	1	2	89.89	41.50
PONTIKI COAL LLC	2	3	2			
WOLVERINE RESOURCES INC	2	3	2	5	1,635.68	820.89
BLACK DIAMOND RESOURCES INC	2	2	1			
BLACK FOREST COAL, LLC	2	2	1	2	171.94	61.00
CARR FORK DEVELOPMENT INC	2	2	1	1	138.59	35.87
CLINTWOOD ELKHORN MINING COMPANY	2	2	2	42	44,485.33	1,768.48
D & J COAL COMPANY LLC	2	2	1	5	2,041.94	384.00
DIXIE FUEL COMPANY LLC	2	2	2	5	1,708.69	631.32
GWENCO INC	2	2	1	1	615.30	4.00
ISLAND CREEK COAL COMPANY	2	2	1	2	18,030.60	460.00
MIDDLE FORK DEVELOPMENT CORP	2	2	1	2	498.21	345.00
PHOENIX COAL PROCESSING COMPANY, LLC	2	2	1	1	115.29	80.00
PHOENIX RESOURCES, LLC	2	2	1	1	191.50	85.00
RANDY-D, LLC	2	2	1	1	901.79	6.00
REX COAL COMPANY INC	2	2	2	6	6,776.77	216.00
RIVER VIEW COAL, LLC	2	2	2	3	28,660.60	763.27
SEBREE MINING LLC	2	2	2	6	30,059.10	582.10
SKYLINE EXCAVATION INC	2	2	1	1	172.50	90.00
SMITH PROCESSING COMPANY	2	2	2	2	16.70	16.50
STURGEON MINING COMPANY INC	2	2	2	6	2,741.51	683.04
THE RAVEN CO INC	2	2	1			
WESTERN KENTUCKY MINERALS, INC	2	2	1	4	1,401.30	642.00
AMERICAN HIGHWALL MINING LLC	1	7	1	2	189.86	26.76
RIO MINING LLC	1	5	1	1	87.51	17.50
BSD1 LLC	1	4	1			
DAVENPORT COAL COMPANY, LLC	1	4	1	1	25.30	14.00
HONAKER COAL COMPANY, LTD	1	4	1	1	29.22	2.00
HENDRICKSON EQUIPMENT INC	1	3	1	1	111.10	40.00
JMEG MINE LLC	1	3	1	1	33.30	10.00
REDBUD MINING LLC	1	3	1	2	290.69	40.00
SAND HILL COAL PROCESSING, LLC	1	3	1	8	1,178.75	368.00
ANDALEX RESOURCES INC	1	2	1	1	187.14	12.00
BER COAL LLC	1	2	1	1	21.41	3.50
CARBONADO MINE 3 LLC	1	2	1	1	283.30	100.00
CUMBERLAND RIVER COAL COMPANY	1	2	1	11	25,568.44	4,093.56

Permittee	# NCs	Violations	Permits in Violation	Total Permits	Permitted Acres	Disturbed Acres
DEMA COAL COMPANY INC	1	2	1	2	990.60	6.43
DETHORAGE MINERALS INC	1	2	1	1	280.68	279.00
FUEL RECOVERY PARTNERS LLC	1	2	1			
HIGH RIDGE MINING LLC	1	2	1	5	2,723.71	408.34
HIGHLAND MINING COMPANY, LLC	1	2	1	2	18,035.83	132.60
MAYO RESOURCES INC	1	2	1	4	3,143.66	217.34
METELECTRIC ENERGY LLC	1	2	1	1	636.95	220.17
OXFORD MINING COMPANY KENTUCKY LLC	1	2	1	7	5,789.50	2,593.13
PRIMETIME ENERGY LLC	1	2	1	1	161.06	14.00
RICHARD COLLINS	1	2	1	1	32.70	3.00
ROADSIDE PROCESSING INC	1	2	1	2	145.15	145.15
ROCKHAMPTON ENERGY LLC	1	2	1	2	3,043.16	50.00
WELLMORE COAL CORPORATION	1	2	1	14	13,964.17	483.60
AMERICAN COAL ENERGY LLC	1	1	1	2	942.01	16.63
B & B ENERGY LLC	1	1	1	1	53.00	24.20
B & R MINING, LLC	1	1	1	1	51.51	42.00
B Y INC	1	1	1	1	35.10	28.50
BELL COUNTY COAL CORPORATION	1	1	1	13	22,294.78	578.49
BLUE GEM MINING INC	1	1	1	1	70.78	10.00
BLUEGRASS DEVELOPMENT GROUP LLC	1	1	1	1	89.72	29.82
BOWIE REFINED COAL, LLC	1	1	1	1	440.33	440.33
BRC ALABAMA NO. 3, LLC	1	1	1	1	469.50	469.50
CCI SLOES BRANCH TERMINAL LLC	1	1	1	1	16.38	15.00
CORYDON RESOURCES LLC	1	1	1	1	15,800.90	9.30
COVOL FUELS NO 2 LLC	1	1	1	1	3,339.93	426.73
COVOL FUELS NO 3 LLC	1	1	1	13	5,366.50	1,611.75
CYPRUS CREEK LAND COMPANY	1	1	1			
D & H COAL COMPANY OF LAUREL COUNTY INC	1	1	1	1	58.40	57.00
D & R COAL INC	1	1	1	1	211.28	13.90
FM ENERGY LLC	1	1	1	1	203.92	4.50
FRAZIERNANTZ LLC	1	1	1	2	148.38	40.05
GLEN ALUM OPERATIONS LLC	1	1	1	2	2,855.44	23.00
GOOSE CREEK MINING LLC	1	1	1	1	163.80	6.00
H & D COAL COMPANY INC	1	1	1	1	162.80	125.00
HARDSHELL TIPPLES INC	1	1	1	1	682.23	6.62
HEI SERVICES LLC	1	1	1	1	70.55	3.00
HOPKINS COUNTY COAL LLC	1	1	1	17	23,848.43	5,695.75
JAMIESON CONSTRUCTION COMPANY	1	1	1	7	960.66	305.00
KANAWHA RIVER TERMINALS, LLC	1	1	1	2	46.30	44.00
L & R COALS	1	1	1	1	43.20	4.50
LICKING RIVER RESOURCES INC	1	1	1	14	10,694.85	3,626.00
MINE RITE COAL CO INC	1	1	1	4	865.80	230.13
NFC MINING INC	1	1	1	3	71.07	31.98
PBP ENERGY, LLC	1	1	1			
PIGMY COAL COMPANY	1	1	1	1	1,768.00	22.00

Permittee	# NCs	Violations	Permits in Violation	Total Permits	Permitted Acres	Disturbed Acres
PINNACLE COAL CORPORATION	1	1	1	1	590	590
RED RIVER COAL COMPANY INC	1	1	1	2	715.12	0.00
REDMON COAL CO INC	1	1	1	1	341.60	10.00
RICHARDSON FUEL INC	1	1	1			
SAFECO, INC	1	1	1	1	19.00	9.16
SMITH COAL PROCESSING	1	1	1	1	10.90	10.00
SOUTHFORK COAL CO	1	1	1	5	3,331.16	210.34
STAFLAND ENERGY LLC	1	1	1	1	317.36	147.00
STRATA MINING INC	1	1	1	3	3,142.74	355.31
THE ELK HORN COAL COMPANY LLC	1	1	1	3	1,965.84	36.01
TORCHLIGHT ENERGY, INC	1	1	1	1	122.29	11.00
TRANSRAIL PROPERTIES INC	1	1	1	1	14.00	14.00
UNION COUNTY COAL COMPANY, LLC	1	1	1			

APPENDIX E
Permittees Issued Non-Compliances by KYDNR
(Alphabetical Listing)

Permittee	# NCs	Violations	Permits in Violation	Total Permits	Permitted Acres	Disturbed Acres
A & G COAL CORPORATION	5	5	1	1	684.58	220.00
ADAMS & BURKE CONTRACTORS & DEVELOPERS LLC	4	7	1	1	110.04	66.00
ADVANCE ENERGY II, LLC	2	6	1	1	237.09	85.00
ALDEN RESOURCES LLC	9	16	8	21	10,735.80	1,595.90
AMERICAN COAL ENERGY LLC	1	1	1	2	942.01	16.63
AMERICAN HIGHWALL MINING LLC	1	7	1	2	189.86	26.76
ANDALEX RESOURCES INC	1	2	1	1	187.14	12.00
APEX ENERGY INC	10	15	8	24	14,839.82	3,933.70
APPALACHIAN MINING AND RECLAMATION LLC	2	6	2	3	790.69	115.71
APPALACHIAN MINING LLC	3	7	1	1	11.00	0.03
APPOLO FUELS INC	9	14	7	17	12,215.25	1,923.16
ARGUS ENERGY LLC	2	3	1	6	6,496.89	506.21
ARMSTRONG COAL COMPANY INC	4	4	4	26	61,879.83	5,690.80
B & B ENERGY LLC	1	1	1	1	53.00	24.20
B & R CONSTRUCTION	4	4	1	1	9.22	5.00
B & R MINING, LLC	1	1	1	1	51.51	42.00
B & W RESOURCES INC	12	21	7	21	6,907.01	1,971.38
B Y INC	1	1	1	1	35.10	28.50
BARNETT ENERGY, LLC	3	7	1	1	292.59	85.00
BDCC HOLDING COMPANY INC	5	5	4	23	44,329.35	1,294.57
BEECH CREEK COAL COMPANY, LLC	7	19	3	1	674.30	164.00
BELL COUNTY COAL CORPORATION	1	1	1	13	22,294.78	578.49
BER COAL LLC	1	2	1	1	21.41	3.50
BETHEL COAL COMPANY, INC	4	13	1	1	85.90	35.00
BLACK DIAMOND RESOURCES INC	2	2	1			
BLACKFOREST COAL, LLC	2	2	1	2	171.94	61.00
BLACKHAWK MINING LLC	5	7	2	5	2,619.53	94.21
BLEDSE COAL CORPORATION	4	5	3	21	33,353.48	2,344.86
BLUE GEM MINING INC	1	1	1	1	70.78	10.00
BLUE MOUNTAIN MINING, INC	6	8	2			
BLUE RIDGE EXCAVATING LLC	4	6	1	1	62.00	18.00
BLUEBRIDGE MINING GROUP LLC	5	11	1	1	95.00	65.00
BLUEGRASS DEVELOPMENT GROUP LLC	1	1	1	1	89.72	29.82
BOWIE REFINED COAL, LLC	1	1	1	1	440.33	440.33
BRC ALABAMA NO. 3, LLC	1	1	1	1	469.50	469.50
BSD1 LLC	1	4	1			
C & R COAL COMPANY INC	12	16	3	3	797.90	470.00
C & R HOLDING OF EASTERN KENTUCKY LLC	2	10	1	1	176.75	177.00
CAM MINING LLC	7	10	4	24	33,539.59	2,851.67
CAMBRIAN COAL CORPORATION	16	21	7	17	6,541.63	3,741.50
CARBONADO MINE 3 LLC	1	2	1	1	283.30	100.00
CARR FORK DEVELOPMENT INC	2	2	1	1	138.59	35.87
CCI SLONES BRANCH TERMINAL LLC	1	1	1	1	16.38	15.00
CHAROLAIS MINING COMPANY, LLC	4	7	1	1	516.50	453.40
CHAS COAL LLC	5	10	1	1	4,676.18	15.00

Permittee	# NCs	Violations	Permits in Violation	Total Permits	Permitted Acres	Disturbed Acres
CHEYENNE RESOURCES INC	2	5	1	6	3,396.14	2,684.33
CLINTWOOD ELKHORN MINING COMPANY	2	2	2	42	44,485.33	1,768.48
CLOVERFORK MINING & EXCAVATING INC	9	15	4	4	2,391.84	1,109.49
COAL OPERATORS 1 LLC	6	11	2	2	421.36	269.00
COOK AND SONS MINING INC	4	5	3	3	2,076.59	493.67
CORYDON RESOURCES LLC	1	1	1	1	15,800.90	9.30
COVOL FUELS NO 2 LLC	1	1	1	1	3,339.93	426.73
COVOL FUELS NO 3 LLC	1	1	1	13	5,366.50	1,611.75
CRITTENDEN COUNTY COAL INC	7	10	2	2	7,092.70	417.76
CUMBERLAND RIVER COAL COMPANY	1	2	1	11	25,568.44	4,093.56
CUZ COAL COMPANY LLC	3	7	1	1	566.37	220.00
CYPRUS CREEK LAND COMPANY	1	1	1			
CZAR COAL CORPORATION	7	18	5	20	30,261.06	3,826.57
D & H COAL COMPANY OF LAUREL COUNTY INC	1	1	1	1	58.40	57.00
D & J COAL COMPANY LLC	2	2	1	5	2,041.94	384.00
D & R COAL INC	1	1	1	1	211.28	13.90
DAVENPORT COAL COMPANY, LLC	1	4	1	1	25.30	14.00
DAVIS ENERGY, LLC	3	3	2	6	994.95	308.00
DEANE MINING LLC	7	10	5	21	29,124.21	2,303.14
DEEP WOODS MINING LLC	7	10	1	1	293.80	6.00
DEMA COAL COMPANY INC	1	2	1	2	990.60	6.43
DETERAGE MINERALS INC	1	2	1	1	280.68	279.00
DIXIE FUEL COMPANY LLC	2	2	2	5	1,708.69	631.32
DUSTY DIAMOND COMPANY INC	4	10	1	1	2,000.31	220.00
EASTERN KENTUCKY MINING INC	4	6	1	1	333.84	90.74
EMPIRE COAL PROCESSING LLC	3	9	3	3	244.02	85.05
FCDC COAL INC	12	28	9	29	24,691.41	947.83
FM ENERGY LLC	1	1	1	1	203.92	4.50
FOUR STAR RESOURCES LLC	12	19	4	4	858.79	189.22
FRASURE CREEK MINING LLC	32	67	18	42	30,271.94	15,473.93
FRAZIERNANTZ LLC	1	1	1	2	148.38	40.05
FUEL RECOVERY PARTNERS LLC	1	2	1			
GIRDNER MINING COMPANY INC	5	15	2	2	539.45	27.00
GLEN ALUM OPERATIONS LLC	1	1	1	2	2,855.44	23.00
GOOSE CREEK MINING LLC	1	1	1	1	163.80	6.00
GWENCO INC	2	2	1	1	615.30	4.00
H & D COAL COMPANY INC	1	1	1	1	162.80	125.00
HARDSHELL TIPPLES INC	1	1	1	1	682.23	6.62
HARLAN RECLAMATION SERVICES LLC	2	6	2	40	106,865.09	2,290.02
HARLAN-CUMBERLAND COAL COMPANY LLC	5	8	2	5	13,926.19	566.89
HEI SERVICES LLC	1	1	1	1	70.55	3.00
HENDRICKSON EQUIPMENT INC	1	3	1	1	111.10	40.00
HERITAGE COAL COMPANY LLC	3	4	1	4	29,460.54	1,829.50
HIGH RIDGE MINING LLC	1	2	1	5	2,723.71	408.34
HIGHLAND MINING COMPANY, LLC	1	2	1	2	18,035.83	132.60

Permittee	# NCs	Violations	Permits in Violation	Total Permits	Permitted Acres	Disturbed Acres
HONAKER COAL COMPANY, LTD	1	4	1	1	29.22	2.00
HOPKINS COUNTY COAL LLC	1	1	1	17	23,848.43	5,695.75
ICG HAZARD LLC	3	4	1	27	24,996.50	8,920.52
IKERD MINING, LLC	15	18	5	5	1,264.52	621.97
INFINITY ENERGY, INC	8	9	3	3	1,095.19	450.25
ISLAND CREEK COAL COMPANY	2	2	1	2	18,030.60	460.00
J & M EQUIPMENT AND CONSTRUCTION CO INC	2	5	1	1	97.17	94.70
JAMIESON CONSTRUCTION COMPANY	1	1	1	7	960.66	305.00
JCMC, LLC	5	7	1	1	94.57	28.00
JMEG MINE LLC	1	3	1	1	33.30	10.00
JOSHUA ENTERPRISES, INC	4	4	1	1	166.10	120.00
KANAWHA RIVER TERMINALS, LLC	1	1	1	2	46.30	44.00
KANNAN MINING COMPANY	4	5	1	1	154.71	88.17
KEENER RIDGE COALS, INC.	3	4	1	3	775.97	214.00
KENTUCKY FUEL CORPORATION	70	101	37	39	53,178.29	6,057.31
L & R COALS	1	1	1	1	43.20	4.50
LA ENERGY, LLC	7	7	2	1	92.90	4.00
LANDFALL MINING INCORPORATED	12	19	3	4	96.90	62.00
LANDMARK MINING COMPANY INC	2	3	1	18	9,565.22	232.25
LAUREL MOUNTAIN RESOURCES LLC	3	6	2	25	15,771.21	8,929.18
LCC KENTUCKY LLC	14	14	10	13	8,770.86	3,671.94
LEE-PAUL COAL COMPANY INC	8	8	2			
LEEKO INC	5	6	4	21	31,494.53	3,310.88
LEFT FORK MINING COMPANY INC	8	11	3	4	4,445.76	144.55
LESLIE MOUNTAIN COAL COMPANY INC	3	8	1	1	267.58	94.74
LICKING RIVER RESOURCES INC	1	1	1	14	10,694.85	3,626.00
LOCUST GROVE INC	6	10	5	14	6,265.22	2,243.06
M J K MINING INCORPORATED	2	3	1	2	89.89	41.50
MANALAPAN MINING COMPANY INC	28	50	12	12	15,944.86	806.73
MARTIN COUNTY COAL CORPORATION	4	5	4	28	23,298.38	6,934.76
MASON COAL INC	4	8	2	3	3,403.78	11.08
MATT/CO INC	10	15	6	23	15,899.49	402.42
MAYO RESOURCES INC	1	2	1	4	3,143.66	217.34
MCCOY ELKHORN COAL CORPORATION	8	18	7	33	53,639.78	1,271.62
METELECTRIC ENERGY LLC	1	2	1	1	636.95	220.17
MIDDLE FORK DEVELOPMENT CORP	2	2	1	2	498.21	345.00
MINE RITE COAL CO INC	1	1	1	4	865.80	230.13
MONTIES RESOURCES LLC	6	6	2	1	147.06	31.00
MOUNTAIN RECLAMATION AND CONSTRUCTION LLC	3	5	1	2	522.19	210.00
MOUNTAINSIDE COAL CO INC	5	13	4	7	2,160.01	885.60
NALLY & HAMILTON ENTERPRISES INC	19	37	14	64	42,730.73	16,300.44
NFC MINING INC	1	1	1	3	71.07	31.98
OXFORD MINING COMPANY KENTUCKY LLC	1	2	1	7	5,789.50	2,593.13
PATRIOT COAL COMPANY, LP	3	3	3	15	27,379.57	3,687.40
PBP ENERGY, LLC	1	1	1			

Permittee	# NCs	Violations	Permits in Violation	Total Permits	Permitted Acres	Disturbed Acres
PHOENIX COAL PROCESSING COMPANY, LLC	2	2	1	1	115.29	80.00
PHOENIX RESOURCES, LLC	2	2	1	1	191.50	85.00
PIGMY COAL COMPANY	1	1	1	1	1,768.00	22.00
PINE BRANCH MINING, LLC	5	7	3	13	8,354.50	5,878.01
PINNACLE COAL CORPORATION	1	1	1	1	5.90	5.90
PONTIKI COAL LLC	2	3	2			
POWELL BRANCH ENERGY LLC	3	3	1			
PREMIER ELKHORN COAL COMPANY	14	29	9	43	54,847.95	9,060.12
PRIMETIME ENERGY LLC	1	2	1	1	161.06	14.00
RANDY-D, LLC	2	2	1	1	901.79	6.00
RAVEN ENERGY INC	3	7	1	1	216.09	105.00
RED RIVER COAL COMPANY INC	1	1	1	2	715.12	0.00
REDBUD MINING LLC	1	3	1	2	290.69	40.00
REDMON COAL CO INC	1	1	1	1	341.60	10.00
REVELATION ENERGY LLC	55	137	23	88	88,044.09	22,166.48
REX COAL COMPANY INC	2	2	2	6	6,776.77	216.00
RICHARD COLLINS	1	2	1	1	32.70	3.00
RICHARDSON FUEL INC	1	1	1			
RIO MINING LLC	1	5	1	1	87.51	17.50
RIO MINING MANAGEMENT LLC	2	6	1	1	191.70	60.00
RIVER VIEW COAL, LLC	2	2	2	3	28,660.60	763.27
ROAD FORK DEVELOPMENT COMPANY INC	4	5	3	10	24,367.90	921.68
ROADSIDE PROCESSING INC	1	2	1	2	145.15	145.15
ROCKHAMPTON ENERGY LLC	1	2	1	2	3,043.16	50.00
SAFECO, INC	1	1	1	1	19.00	9.16
SAND HILL COAL PROCESSING, LLC	1	3	1	8	1,178.75	368.00
SANDLICK COAL COMPANY LLC	9	15	6	13	15,084.36	2,367.91
SAPPHIRE COAL COMPANY	7	10	5	13	17,212.42	931.42
SEBREE MINING LLC	2	2	2	6	30,059.10	582.10
SEQUOIA ENERGY LLC	52	87	19	19	27,765.43	1,143.73
SHAMROCK COAL COMPANY INCORPORATED	6	9	4	7	24,339.33	442.00
SIDNEY COAL COMPANY INC	4	4	4	41	95,836.91	2,169.74
SKYLINE EXCAVATION INC	2	2	1	1	172.50	90.00
SMITH COAL PROCESSING	1	1	1	1	10.90	10.00
SMITH PROCESSING COMPANY	2	2	2	2	16.70	16.50
SOUTHFORK COAL CO	1	1	1	5	3,331.16	210.34
STAFLAND ENERGY LLC	1	1	1	1	317.36	147.00
STONE RIDGE RESOURCES INC	5	12	1	1	37.94	14.00
STRAIGHT CREEK COAL MINING INC	10	17	8	36	19,365.02	6,374.54
STRATA MINING INC	1	1	1	3	3,142.74	355.31
STRONG BROTHERS MINING	4	4	1	1	161.95	102.84
STURGEON MINING COMPANY INC	2	2	2	6	2,741.51	683.04
T & T ENERGY, LLC	25	59	5	5	1,154.63	602.50
THE ELK HORN COAL COMPANY LLC	1	1	1	3	1,965.84	36.01
THE RAVEN CO INC	2	2	1			

Permittee	# NCs	Violations	Permits in Violation	Total Permits	Permitted Acres	Disturbed Acres
TORCHLIGHT ENERGY, INC	1	1	1	1	122.29	11.00
TRANSRAIL PROPERTIES INC	1	1	1	1	14.00	14.00
TWILIGHT ENERGY, LLC	3	7	1	1	24.09	18.96
UNION COUNTY COAL COMPANY, LLC	1	1	1			
VIKING ACQUISITION GROUP LLC	11	23	3	3	903.56	225.86
VIRGINIA FUEL CORPORATION	55	72	15	15	17,749.65	1,048.39
W & F CONTRACT AUGERING INC	5	7	1	1	37.31	19.00
WEBSTER COUNTY COAL LLC	7	7	7	8	57,396.52	588.60
WELLMORE COAL CORPORATION	1	2	1	14	13,964.17	483.60
WESTERN KENTUCKY MINERALS, INC	2	2	1	4	1,401.30	642.00
WOLVERINE RESOURCES INC	2	3	2	5	1,635.68	820.89
XCELL ENERGY AND COAL COMPANY, LLC	6	8	1	1	377.16	190.00